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An Action Research into Strategizing

By

Sergio Quinones-Romandia

A Dissertation Submitted in Partial Fulfillment of the Requirements for the Degree

Of

Executive Doctorate in Business

In the Robinson College of Business

Of

Georgia State University

# GEORGIA STATE UNIVERSITY

### J. MACK ROBINSON COLLEGE OF BUSINESS

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### ACCEPTANCE

This dissertation was prepared under the direction of Sergio Quinones-Romandia Dissertation Committee. It has been approved and accepted by all members of that committee, and it has been accepted in partial fulfillment of the requirements for the degree of Executive Doctorate in Business in the J. Mack Robinson College of Business of Georgia State University.

Richard Phillips, Dean

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### **ABBREVIATIONS AND DEFINITIONS**

BOP: Base of the Pyramid

ANSA: Acronym for Agroservicios Nacionales SAPI de CV (English translation: National Agro-Services, Society of Investment Promotion and Variable Capital) **AE:** AgroEstacion NGO: Non-Governmental Organization **MNC:** Multinational Company DCT: Dynamic Capabilities Theory **ODS:** Option-Driven Strategizing GSU: Georgia State University BANRURAL: Banco Nacional de Crédito Rural (National Agrarian Credit Bank) PH: Patrimonio Hoy (English translation: Patrimony of Today) **CPR:** Collaborative Practice Research OSD: Out-of-Schedule Data **APM:** Active participation meeting PO: Participant observation PBA: Partnership business agreement SAI: Acronym for the Spanish name of the administrative software, SISTEMA ADMINISTRATIVO INTEGRAL. (Integral administrative system) CFA: Contract farming agreement JV: Join venture GMO: Genetically modified organism

#### ABSTRACT

Crafting Alliances Between A Mexican Agribusiness And The Base Of The Pyramid: An Action Research Into Strategizing By

Sergio Quinones-Romandia May 2016

Committee Chair: Lars Mathiassen Major Academic Unit: J. Mack Robinson College of Business

More than 4 billion people in the world face hunger every day. In addition to this imperative shortcoming, the world's poor confront other side effects of poverty as well, including violence, forced mobility, lack of access to education and early death. In a globalized world where capitalism has become the prevailing economic ideology, alleviating poverty can no longer be the exclusive responsibility of governments, richer nations, and non-governmental organizations (NGOs). Today, the private sector must also "take the torch" and contribute to easing the suffering of more than half the world's population.

The Base of the Pyramid (BOP) strategy is an important opportunity for the world's private sector to create new business opportunities while at the same time helping address and alleviate poverty. However, while the literature describes several study cases, we still have limited knowledge about the process through which managers engage in BOP strategizing. Against this backdrop, this dissertation provides a detailed account of how a Mexican agribusiness: Agroservicios Nacionales, SAPI de CV (ANSA) developed and implemented a BOP strategy to co-create value with its distributors and poor corn farmers.

Our Georgia State University (GSU) research team combined Dynamic Capability

Theory (DCT) and Option-Driven Strategizing (ODS) and adopted action research to establish close collaboration among the firm's top directors, a select group of its managers, designated local distributors, and our researcher team members. This dissertation presents a detailed account of the strategizing process, how AgroEstacion was conceived, how it was implemented, and the outcomes and experiences of the overall process. I also discuss the challenges our team faced, how they were resolved, and the opportunities that emerged from the strategizing process. Finally, I describe an Integrated Model that firms can use to strategize BOP opportunities in a way that benefits both their business and the surrounding society.

This dissertation also represents the challenges of utilizing DCT in a practical case, following the suggestions of several authors as Teece, Pisano, Shuen, Zollo, Winters and others, from major works of writing that encourage researchers to take this theory into a more aggregate system and apply it in a practical case.

#### I CHAPTER 1: INTRODUCTION

Imagine you are a farmer in a remote area of a developing Latin American economy. Or, to put it in a less politically correct way, imagine you are a farmer in a third-world country. Although the wider world might call your home country an emerging economy or some other euphemism, the reality is that you live in an impoverished area. Getting to the nearest urban area takes you almost four hours, despite being only 55 miles away; communications infrastructure is absent; and the roads you travel on are rough. If night falls, you must stay put and wait for daylight, because it is not safe to travel in the dark. You live in the hills— or La Sierra, as they have been called since you were a kid. Your grandfather was a farmer, and so was your father. You attended the rural elementary school, but dropped out because men need to work in the fields; "you are a man," they told you, when you were only 10 years old. So, you learned what your father learned from your grandfather, who died when he was just 50 years old. You have no other options other than running away to the city, where you would try to carve out some kind of life; or taking the long journey North-to the United States of America—risking your life, crossing the desert, and then (if you make it) doing the same job there that you would have done in your home country, but in service of American farmers. Instead, you decided to stay and have some faith in the future. You married a good woman and had some children and kept farming the land you inherited from your father.

Now, imagine that you are quite different from your father and grandfather. Despite your lack of formal education, you have ambitions and want to be and have more than they did. You want to give your family a better life. You want your children to have a formal education and better healthcare. You want to own some property and other material assets. You want your family to be fed every day and to have better opportunities. You want these things, but you do not know how to get them. You have heard that help is available—financial support, funds from the government, money for farmers like you who own small plots of land—but you do not understand how to access that help. The politicians that appear in your small town every sixth year promise you and your neighbors that you will receive support once they win the election, but the funding, if you are lucky to receive it, is not enough. In short, you are trapped at the Base of the Pyramid (BOP).

BOP strategizing emerged as a business trend over the past decade, rooted in the 2004 publication of C.K. Prahalad's *The Fortune at the Bottom Of the Pyramid, Eradicating Poverty through Profits*. Literature about the BOP, BOP markets, and BOP poverty alleviation increases yearly in high-profile scientific and practitioner journals; articles include "Entrepreneurial Opportunities and Poverty Alleviation," (Alvarez & Barney, 2014); "Building Partnerships to Create Social and Economic Value at the Base of the Global Development Pyramid," (Calton, Werhane, Hartman, & Bevan, 2013); "The Mirage of Marketing to the Bottom of the Pyramid: The Perspectives of Multinational Corporations," (Karnani, 2007); and "Business Strategy at the Base of the Pyramid," (Schrader, Freimann, & Seuring, 2012). However, we have developed little knowledge about how individual firms might actually strategize BOP opportunities and strategies that practitioners follow to co-create value with the BOP segment. Being able to study successful use cases can help us assess the BOP proposition's value and potential

impact, as well as create the requisite motivation and background for more closely examining the process of strategizing BOP opportunities. That is, such cases can document tangible ways in which firms were able to help people trapped at the BOP.

The focus of this dissertation is to address this void, not based on charity thinking or a philanthropic mindset. Instead, it is anchored in what Prahalad articulated as "making profit, making profitable the unprofitable" (Prahalad, 2010) —just as our farmer imagined in the Introduction-or, as Bill Gates put it in his speech at the 2008 World Economic Forum—anchored in *creative capitalism* (Gates, 2008). The dissertation will investigate the dynamic capabilities (Constance E. Helfat & Margaret A. Peteraf, 2003; Tashman & Marano, 2009; David Teece & Pisano, 1994) of a group of primary stakeholders in Mexico's corn production process: ANSA, its distributors, and BOP corn farmers. The collaboration between the GSU research team and the stakeholders progressed in two stages. It started in April 2014 based on action research (Susman & Evered, 1978), a particular form of engaged scholarship (Van de Ven, 2007) that let us both contribute to practical problem solving with the stakeholders and develop new knowledge about BOP strategizing. This dissertation builds on early results published in (Cazares, Lawson-Lartego, Romandia, & Mathiassen, 2015) and reports on the overall action research effort to offer a comprehensive account of how ANSA eventually strategized and implemented a new franchise business, AgroEstacion, tailored to the industry and the Mexican context. The goal was to co-create value among three main players:

- ANSA and AgroEstacion,
- the network of local distributors, and

• the BOP corn farmers.

Early in our research collaboration, we uncovered the key resources across the stakeholder network, which let us identify a set of available options for value co-creation among the main players. Option-Driven Strategizing (ODS) (Bowman & Moskowitz, 2001; De Schryver & Asselbergh, 2003; Faulkner, 1996; Kogut & Kulatilaka, 1994) helped us classify which of those options could be made actionable and eventually realized (Constance E. Helfat & Margaret A. Peteraf, 2003; Sandberg, Mathiassen, & Napier, 2014). Our early findings allowed us to propose a conceptual model for strategizing BOP value co-creation. The Integrated Model for BOP Strategizing combines Dynamic Capability Theory (DCT) with ODS, focusing on the two main players in this project: the firm, with its physical, knowledge, and organizational resources; and the BOP network, with its complementary set of physical, knowledge, and organizational resources (Cazares et al., 2015).

The goal of this dissertation project is to continue the practical work of implementing AgroEstacion—a joint effort between ANSA and local distributors that targets BOP corn farmers. In this process, the research team will apply, validate, and further develop the proposed conceptual model. Through this action research with ANSA and the other stakeholders, our research project will make three contributions. First, we will make a practical contribution to ANSA, the distributors, and the BOP farmers by implementing new collaboration patterns, both helping the BOP participants and strengthening ANSA's competitive position. Second, we will contribute new empirical evidence to the BOP literature by offering a detailed account of how ANSA and other stakeholders strategized and realized BOP opportunities in the Mexican corn industry.

Third, we will validate and further develop the Integrated Model for BOP Strategizing, making a theoretical contribution to the BOP literature.

Our research project focuses on crafting alliances within the Mexican BOP context, in which farmers and small local firms struggle daily to survive. ANSA provides requisite and specific resources for BOP farmers, while the firm's distributors provide local knowledge and new opportunities. However, fully realizing the potential of these relationships is possible only if new, powerful alliances are formed. The goal is a win for all stakeholders: BOP farmers (like our protagonist at the beginning of the introduction) get the opportunity to grow more and better corn; local distributors (BOP local businesses) get better commercial opportunities and support; and ANSA strengthens its market position. Such wins cannot be achieved through a rigid, uniform approach; solutions must be *crafted* to fit the context. The concept of crafting entails artful—and often manual-creation. When an artisan creates a series of pieces, those pieces might be similar, but they are never the same. Artisans adapt their work to the context and to their emotions. Applying this crafting concept in the BOP market means that firms must adapt-rather than simply enforce-a preplanned model; to do this, they must be ethically and emotionally committed. Hence, this dissertation seeks to leverage ANSA's collaboration to provide knowledge and guidance that other firms can use to improve and optimize their own interactions with the BOP context, and to do so in a way that not only increases other firms' market participation and profits, but also builds knowledge and social value to improve the lives of not only the BOP population, but all stakeholders in the process (Klein, 2008).

In summary, this dissertation seeks to address the following research question: *How can an agribusiness company strategize and implement co-creation of value with BOP corn farmers in Mexico?* Following (Mathiassen, 2014), Table 1 summarizes the proposed research design. The rest of this proposal describes each of these research components and their motivations in more detail.

Style element	Description
P: problem setting	ANSA, a Mexican agribusiness, wants to design and create a new business model for penetrating additional markets in the BOP corn farmers' segment. This effort, shared with select BOP distributors, explores, exploits, and seeks to improve the capabilities of ANSA and the BOP distributors. It also seeks to improve ANSA's market position and co- create value with the BOP distributors and farmers
A: area of concern	Co-creating value with the BOP farmers
F: theoretical framing	Integrated Model of BOP strategizing, Dynamic Capability Theory, and Option-Driven Strategizing
M: research method	Action Research developed by a team consisting of an EDB student (the author) who holds a director position at ANSA; the firm's executive team; and the dissertation advisor. The research draws on archival and bibliographic data to inform collaborative workshops. The research had three primary goals: 1) Design the new company (AgroEstacion) and launch its operations 2) Develop a detailed franchise business model with the selected distributors. 3) Create new knowledge about strategizing BOP value co-creation
RQ: research question	How can an agribusiness company strategize and implement the co- creation of value with BOP corn farmers in Mexico?
C: contribution	<ul> <li>Contribution to the problem: A strategy for implementing a franchise company to share the capabilities of local BOP distributors, who in turn could become business leaders in their area and channel additional resources to BOP farmers, reducing their problems in areas such as technology and uncertainly about crop sales</li> <li>Contribution to area of concern: Empirical insights into a process for strategizing BOP markets in a particular firm</li> <li>Contribution to the theoretical framing: A conceptual model for strategizing BOP markets, with suggested principles to guide managers in adopting and using the model in similar contexts</li> </ul>

# Table 1 Research Design

**Conflict of interest disclosure.** In keeping with the procedures suggested by GSU's Office of Research Integrity, the author of this dissertation, Sergio Quinonez-Romandia, hereby discloses that he works full-time in the firm where this research was conducted: Agroservicios Nacionales SAPI de CV, located at 1545 Nance Street, Guadalajara, Jalisco, Mexico, 44900. Quinonez-Romandia is the firstborn of the founder and President of ANSA, and he holds the position of Chief Business Officer (CBO), reporting directly to the Chief Executive Officer (CEO) of the firm. He also holds a chair on ANSA's member board and the position known in Mexico's business law as "*scrutator*," with the responsibility of counting and computing the votes in the board meetings.

#### **II CHAPTER 2: PROBLEM SETTING**

There are no problems, only opportunities. —Bill Austin

#### **II.1** The Firm's Challenges

ANSA is a young, medium-sized Mexican firm with more than 200 employees. Its primarily activity is distributing the main brands of the agrochemical industry's biggest Multinational Companies (MNCs), including Dow Chemical, Food Machinery Company (FMC), Monsanto, Bayer, Badische Anilin- und Soda-Fabrik (BASF), and ARYSTA. These MNCs have been working shoulder-to-shoulder with ANSA, and have co-existed with relative ease within the firm's business model, despite developing and promoting competing products that address similar crop diseases. When asked how ANSA has managed to interact with such heavyweight stakeholders, the ANSA board's founder and president said jokingly: "*Do you know how porcupines make love? Very carefully.*" ANSA is, however, more than a product distributor; it represents the brands and defends, promotes, and develops them through a commercial-technical team of agronomists. These agronomists have a dual function: they are both field technicians and salespeople. ANSA's business model has adapted to many rapid changes in the market and the industry over the past 38 years; the company has been consistent, but never static.

ANSA was founded in November 1977 by Sergio Quinonez Rey, a young agronomist who had been recently fired from Roman-Hass, an MNC that is now ironically owned by Dow Chemical—one of ANSA's main suppliers. After leaving Roman-Hass, Quinonez Rey and his family moved from Mexico City to Guadalajara, Mexico's second largest city, located in Jalisco State in the western part of the country.

During the '70s, most of Mexico's advanced agriculture was located in the northern states (Sonora, Sinaloa, Chihuahua, and Tamaulipas), and most of the MNCs and the new Mexican distribution firms competed aggressively to win a piece of that market. Farming in western Mexico held little interest for the MNCs at that time; the market was fragmented and the farmers needed constant advice. ANSA's initial operation was a simple "buy and sell over the counter" process: farmers arrived at the original *petite* store located across from a well-known food market to buy seeds and fertilizers. In 1978, ANSA added agrichemicals to its product line and began to compete in the governmental market through an intermediary: BANRURAL (National Agrarian Credit Bank), the original financial institution created in 1926 to aid Mexican farmers. This private-public commercial operation accelerated the company's growth and, for half a decade, became ANSA's main line of business. The founder recalled those years as challenging ones: "We grew, and finally money started to get into our pockets, but selling to the government wasn't easy. You need to 'oil the machinery,' taking bureaucrats to long, festive meals that endured sometimes until dawn... but the deal could not be made in any other way."

ANSA's history can be described in four phases; those phases defined its business model and made the company what it is today. Table 2 summarizes those historical phases. By the end of the '80s, BANRURAL, ANSA's main customer, went bankrupt. ANSA thus faced its first important challenge, and executives were forced to reconsider the firm's business model. As the company founder put it, "*We had to rethink the whole way of doing business, from big sales to a unique client [BANRURAL] to small-scale sales through stores. We learned that we shouldn't depend on one main customer.*  Although it could be comfortable, it was extremely risky." ANSA's executives thus decided to open two business units closer to the farming areas. This meant that farmers no longer had to travel to Guadalajara city to sell their crops, and corn buyers could settle in the rural areas and built silos there. During that time, other agrochemical distribution companies began taking pesticides and fertilizers directly to the farmers and a few small, competing agrochemical stores opened in the rural areas.

Phase	Description
Phase 1: 1977–1980	BANRURAL era
Phase 2: 1980–1990	Multinational corporations enter the market and the distribution chain begins
Phase 3: 1990–2010	New foreign companies and cheaper products enter the market
Phase 4: 2010– present	Multinational corporation pressures to increase the purchase of inventory

 Table 2 ANSA's four phase history

Based on ANSA's previous sales to the Mexican government, two MNCs (FMC and DOW Chemical) entrusted ANSA with some of their leading products—including FMC's insecticide for soil application, and DOW's corn-selective herbicide. This event triggered Phase 2 in ANSA's history. The MNCs' confidence in ANSA gave it a competitive advantage against the market's already established players, who later disappeared from the industry. The founder recalled this key transition: "*To be honest, at that time, the big distributors had become too self-confident and were not interested in some of the products the MNCs were trying to push into the market. We raised our hands and said: 'Give them to us, and we'll sell them.'"* 

During the '90s, ANSA build a commercial team and began developing a network of distributors at locally owned agro-shops in small towns and villages. In addition, other MNCs approached ANSA—including BASF and Monsanto, and smaller MNCs, such as Buckman and Arysta—trusting the young firm with their leading brands. The business grew, but not without competition. Still, ANSA focused on its business process, its suppliers, and its network of distributors, and this mindset strengthened its competitive position.

A major change in ANSA's context emerged in the first decade of the 21st century. As Figure 1 shows, since the '80s, ANSA's business process had been a supplier-firm→local distributor→farmer model in which stakeholders depended on each other. In this model, ANSA played what (Sheth, 2011) classifies as "The Native Son" role as a large-scale domestic enterprise. However, as many MNC products lost their patents, new companies from China and India began manufacturing them at lower costs and introducing them into the Mexican market, dramatically changing the existing model.



**Figure 1 ANSA's business process** 

These new international companies changed the model, skipping the distribution chain and going directly to local distributors. This strategy was motivated by the fact that the big distributors (such as ANSA) already worked with the traditional MNCs. As a result of this new model, similar—and cheaper—products flowed into the market. At the start of this phase, ANSA persuaded many local distributors and farmers of the risks involved in using low-quality products. However, this phase changed ANSA's distributor network; while some distributors remained loyal to the firm, others became competitors.

More recently, ANSA began experiencing additional pressures: the firm's allies the MNCs that ANSA had remained loyal to—began doing business directly with some of the successful local distributors. ANSA's executives, managers, and sale representatives could not understand how easily some of its strategic suppliers, without negotiating or even notifying the company, simply went down a rung on the business ladder and transformed ANSA's biggest local distributors into their own new partners. When questioned, one of the MNCs' executives explained that the local distributors had two key characteristics that ANSA lacked:

- 1. Direct contact with and data about local corn farmers.
- 2. Knowledge about the commercialization of corn. These local distributors provide farmers with seed, fertilizers, and agrichemicals (and, in some cases, money). Then, at the end of the harvest, the distributors receive the corn and sell it to big firms, paying the differences in the price to the farmer (Figure 2).

However, ANSA's new situation was a painful and indisputable truth. Some executives admitted to a gap that had weakened the long-enjoyed loyalty between ANSA and its distributor network. This gap was ignorance about the details of the distributors' operations and processes. As a top executive from one of ANSA's major suppliers put it: *"ANSA's business model has expired. The firm needs to make some changes or face a slow death."* ANSA's competitive position and, indeed, its long-term survival were at risk. If ANSA kept doing the same things and following the same path, its industry

relevance would diminish and the firm would slowly die. Although its business process was solid and required only a few adjustments and innovations, ANSA's survival depended on its developing new strategies to fill the gap pointed out by suppliers and industry experts.



**Figure 2** The business process of local distributors

### **II.2** The Firm Opportunities

ANSA owns important physical, knowledge, and organizational resources. Over nearly 40 years, ANSA has created a network of warehouses strategically located in the main agricultural areas, which reduces the delivery time between local distributor stores and big farming companies. Some of these warehouses are business units equipped with human, logistic, and IT resources. Agronomists (sale representatives) are on site, supported by administrative professionals that help with transactional details. These warehouses also have important logistic resources. Each agronomist—from the regional manager to the part-time promoter—has a truck, which serves as a small-scale (one-ton capacity) delivery unit. ANSA also has a fleet of medium- and large-capacity trucks to keep inventory near local distributors and farmers. Regarding knowledge resources, ANSA has an experienced commercial team with specialties on specific crops (including corn and avocado). Suppliers and the firm have coaching programs to continually train their commercial team of specialists. One of an agronomist's main responsibilities is to serve as an advisor to farmers and local distributors. In a way, ANSA's sales force consists of technological advisors responsible for pushing products to the market.

ANSA thus faced its challenges armed with years of accumulated market knowledge about climate, crops, soil, and pests. As Figure 3 shows, this knowledge is contained in a network of more than 1,800 distributors in 22 business units scattered strategically throughout Mexico's western, central, and southern states.



Figure 3 Geographical coverage of ANSA in Mexico

ANSA's resources are key strengths in its market position and highly regarded by both suppliers and banks because they provide certainty about ANSA's access to and control over key farming areas. ANSA's 220 employees are constantly supplying data about their specific market areas to the main office. As a result, ANSA has key market details that can consolidate and improve the firm's performance. Table 3 summarizes ANSA's key resources.

Although ANSA's executives are aware that the firm's success lies in its resources, they also realize that ANSA needs to better exploit and further those resources. Currently, ANSA has major opportunities in five key areas:

• ANSA has yet to establish direct contact with small- and medium-sized corn farmers

- Local distributors interact directly with small- and medium-sized corn farmers
- Some small local distributors are very committed to ANSA and want to follow the firm's lead
- An enormous BOP corn farmers' market—6.4 million hectares (Damián-Huato et al., 2013)—exists in ANSA's territory
- ANSA competitors are not strategizing the BOP market

## Table 3ANSA's key resources

Resource Type	ANSA Network
Physical Resources	<ul><li>Warehouses</li><li>Logistics and delivery equipment</li><li>Real-time IT system</li></ul>
Knowledge Resources	<ul> <li>Professional and experienced sales force</li> <li>38 years of market knowledge</li> <li>Deep knowledge of Mexico's agriculture industry</li> <li>Chain of more than 1,350 local distributors</li> </ul>
Organizational Resources	<ul> <li>Speed in responding to customer demands</li> <li>Customers' data history</li> <li>Access to potential customers' credit and legal records</li> <li>Credit and financial assets</li> <li>Network of suppliers and harvest buyers</li> </ul>

# **II.3 Mexican BOP Corn Farmers**

Your godmother Trinidad died, My children grew and where are they now? I lost the harvest, and burned the hut, Without what I love most, nothing matters no more... —Pancho Madrigal, "Jacinto Cenobio," 1988

This verse is from a rural song about a young man who arrives in "La Capital"

(Mexico City) looking for his godfather, a poor and old farmer. The young man finds his

godfather in a farmer's market, working as a back-loader—a low-paying job typically done by the poorest people in Mexico. The young man tells his godfather that he was sent to bring him back to the village. The old man tell his godson that there is nothing left for him back home, because he had lost his wife, his sons, and his crop. The song is a reflection of the BOP farmer's life in rural Mexico: full of uncertainty and devoid of hope. The story also illustrates the reality of almost 4 million Mexicans—a reality filled with uncertainty, fear, hunger, and forced mobility. Corn is the most common crop in Mexico. Some corn farmers, of course, own large plots of land, but the great majority live in the BOP segment. These are the poorest farmers, uneducated and financially unstable. In Mexico, 52.3 percent of the population, or more than 62 million people, live below the poverty line and depend primarily on subsistence agriculture. Farming is a challenging activity anywhere, and Mexico's countryside is no exception. As consumers, we tend to forget where our food comes from, taking for granted a guaranteed food supply. Still, each year, more people like the old man in the song desert farms and fields and move to the cities, or north, to the US, to escape a grim reality.

Many of Mexico's 4 million farmers depend on seasonal corn, or *maize*, production (INEGI census 2012); in 2010, the estimated corn cultivation in Mexico was 7.86 million ha, or 36 percent of the total arable land. Of that amount, 82 percent was planted under rain-fed conditions, and the total production volume was 24.4 million tons (Damián-Huato et al., 2013). Financial support for corn farming is scarce; although corn farmers have access to some government support, the end of the production process is always the same: they face uncertainty about selling their crop, and, in many cases, about receiving payment if they do. The fates of most BOP corn farmers are in the hands of

middlemen, or *coyotes*—that is, people who receive the grain after harvest and sell it to big buyers, such as food, oil, or meat producers. Not all middlemen are exploitive, but exploitation is, unfortunately, a common phenomenon. One of the local distributors we interviewed was a dynamic woman who owns a small agro-shop and coordinates approximately 350 BOP corn farmers. She characterized a typical run-in with exploitive middlemen as follows: "*They told them (the farmers), 'Well, I'm sorry, but the big buyer hasn't paid me yet, so you'll need to wait a little longer.' But in many cases, that's not true, that is just a lie, because the coyotes have received the payment for the corn already, but they wasted the money on other things. They don't care if the farmer needs urgently his money*—they just don't care."

ANSA depends on its local distributors network to access the corn farmers, who are scattered in the sierras and valleys. Some local distributors who were previously ANSA's allies have become its competitors, and have begun to engage in corn commercial processes. These enablers developed "crop contracts" with farmers, providing them with key materials: seeds, fertilizers, and agrichemicals, in that order. Some enablers, the fair ones, also organize and guide the farmers in applying for and receiving government funds each year, which requires doing paperwork (most BOP farmers do not know how to apply for the money, and some are illiterate), these middlemen or enabler firms collect the corn and set the price; the fair ones respect the Chicago Market price, the unfair ones do not. Given this unfair treatment and an absence of other financial resources, corn farmers are rarely able to invest in improving their production performance and thus their standard of living (Calton et al., 2013; Perez-Aleman & Sandilands, 2008). The average US corn farm produces approximately 7.8 to

14 tons of corn per hectare (ton/ha). In Mexico, BOP corn farmers plant and grow their crops during the rainy season, between May and September, and each year they face uncertainty over this natural water supply. Many have an average production of just 3 ton/ha, due to the lack of adequate agrichemicals, fertilizers and/or low performance seeds. With the right seed, fertilizer, and agrichemical technology, they could become more productive and thereby improve their quality of life.

In relation to the BOP in Mexico, several important facts require urgent attention:

- 53 million Mexicans live in what is considered extreme poverty (INEGI and CONEVAL)
- An additional 41 million people are at risk of falling into poverty because they lack appropriate income, education, housing, health, or social security
- According to INEGI, 22.2 percent of Mexico's BOP population (more than 26 million people) lives in rural areas
- The percentage of BOP people living in rural areas has been decreasing over the past 20 years, from 28.7 percent in 1990 to 22.2 percent in 2010, due to the internal and external migration triggered by poverty

In Mexico, corn farming is the rural BOP population's primary activity, for either cultural or practical reasons. Corn in general represents 18 percent of the production value of Mexico's agriculture; in 2012, that translated to 88 billion pesos (6.68 billion dollars). Corn represents 33 percent of Mexico's planted land, or 7.5 million hectares (SAI-SAGARPA, 2014 preliminary numbers). The national average in corn production is 3.2 ton/ha. If corn is planted as a seasonal crop, the production goes down to 2.2 ton/ha,

and if it is planted as an irrigation crop, it goes up to 7.5 ton/ha. These figures are 38 percent below the average global production. For comparison alone, the US national average for all corn production is 7.8 ton/ha (World Bank Data).
#### **III CHAPTER 3: LITERATURE REVIEW**

We never know which lives we influence, or when, or why. —Stephen King

# **III.1 The BOP Proposition**

According to the World Bank, in 2014, more than 4 billion people in the world were living in the BOP on less than \$2.00 per day (see Figure 4). This plight impacts all economies and is a responsibility not just of governments, but of the private sector as well (C. Prahalad & Hart, 2002). Year by year, governments spend billions of dollars on programs to alleviate poverty, but such programs often fail because the BOP population is concentrated in countries that often have unstable governments and a culture of corruption. Also, such countries typically have inadequate control of the financial resources intended to alleviate poverty. Sometimes, the money gets to the people who need it, but the money itself doesn't necessarily solve larger problems such as productivity, corruption, and criminality; other times, the money doesn't reach people who need it at all. Given this, the private sector must speed up its participation in efforts to alleviate poverty and create not only opportunities for the BOP population, but for itself through the development of new business models and new markets. Although capitalism has prevailed as the only functional option for the global economy, the way firms and governments have developed this capitalism is having what negative impact re: BOP etc. Hence, there is an urgent need to adjust this development and create what Prahalad called "inclusive capitalism" (C. K. Prahalad, 2009).

Currently, 60 percent of the global population at the lowest pyramid level is being sustained by the remaining 40 percent. However, with the birth rate slowing in the middle and upper levels of the economic pyramid and increasing in the BOP, the private sector must become creative, not just to increase its own income, but also to address its moral responsibility to society given that the private sector often claims/monopolizes resources that might otherwise sustain the poor, relies on its labor to increase profits. Moreover, firms and governments must change how they look at the BOP and seek to help its members become active stakeholders in the global economy rather than simply passive recipients of altruism (C. K. Prahalad, 2009). Another vital factor here is that the BOP proposition cannot be an exclusive or particular view—imitable and exportable. Instead, it must be *crafted* according to the characteristics of the specific BOP context. The poor are different from region to region, state to state, country to country, and continent to continent; firms must therefore adapt their BOP strategies to the target BOP market's context. Four billion people are not a monolith; their experiences are extremely varied (C. K. Prahalad, 2009). As a result, the BOP's potential cannot be realized unless managers are willing to experiment and innovate (C. K. Prahalad, 2009).



Figure 4 The economic pyramid

Aside from the participation of the MNCs, most of the BOP market's needs are satisfied by small businesses, which are often owned by people who themselves came from the BOP. Given this, regardless of how well intended these micro businesses are, their prices are sometimes higher than those available to the middle segment of the economic pyramid. Other factors also increase the cost of living at the BOP. Most BOP markets are located in hard to reach areas, roads are few and difficult to travel on, and inventory is often damaged on the way or in storage areas. Further, some markets are located in risky weather regions, where extreme humidity and high temperatures can affect inventory sustainability. Additional factors include excessive links in the distribution chain between the firm and the market, over taxation, and monopoly—all of which produce what Prahalad calls "the poverty penalty" (C. K. Prahalad, 2009).

Prahalad published *Fortune at the Bottom of the Pyramid: Eradicating Poverty Through Profits* in 2006; since that time, numerous research efforts have studied the BOP market and actions taken by various MNCs that understood that market's potential (Alvarez & Barney, 2014; Calton et al., 2013; Karnani, 2007; Klein, 2008; Mee-Shew & Belden, 2013; Mezias & Fakhreddin, 2014; Penh, 2009; Perez-Aleman & Sandilands, 2008). The contributions came from both practical and academic perspectives. In some cases, firms developed their own particular BOP strategies, providing case studies in success and failure that contributed to our knowledge. In others cases, academia took the lead, applying theories such as dynamic capabilities in relation to BOP strategies (Marano, 2009).

By 2014, only a few national and international companies had focused their strategies on Mexico's BOP markets. Specifically, the BOP agricultural sector in Mexico warrants study. Although MNCs such as Monsanto (Donnet et al., 2012; Glover, 2007)

have engaged in the BOP approach, their focus has been on the BOP as consumers rather than partners.

## **III.2 BOP Examples**

Different motives and goals have driven firms to contribute at the BOP level over the past 20 years. A mixture of profit and humanistic motives drove each case, while curiosity may have been another trigger, spiced with creativity and ambition. Successful cases emerged from around the world, mostly from MNCs that immersed themselves in the BOP market, but also from new companies that took risks in a market that few had dared to enter before. In the following, we present five examples that highlight what these cases can contribute to our knowledge on targeting the BOP.

**CELTEL (communications):** Founded in the '90s by Mo Ibrahim, an ex-college professor and a software firm CEO, CELTEL was the first telecommunication company to risk incursion into Africa—one of the world's most underserved telecommunication markets. Ibrahim was shocked at that time about the western world's general ignorance about Africa and the immense opportunities the continent held. When he suggested the possibility of entering the African market to his software clients, their responses often bordered on alarmed; as one put it, "Mo, I thought you were smarter than that! You want me to go to my board and say I want to start a business in a country run by this crazy guy Idi Amin?" (p. 41). Africa has 50 countries, 1 billion people, and 11.7 million square miles of land. As an example of the continent's potential, in 1998, the Democratic Republic of Congo had 55 million people and only 3,000 telephone lines. CELTEL launched operations in Africa in 1998 with only five employees. The continent had no fixed telephone lines and no mobile phone competitors at that time; investors had

considered Africa too unknown and too risky. CELTEL started with \$16 million in capital the first year. By 2004, it had 5.2 million managed customers in 13 countries and revenues of \$614 million, with a net profit of \$147 million. In 2004, pressure brought on by capital needs and rejections from financial institutions led Ibrahim to sell CELTEL to ZAIN, a Kuwaiti-based mobile telecommunications company-for \$3.4 billion dollars. CELTEL changed the concept of the mobile phone market. In the '90s, most telecommunication firms focused on making the product more affordable for the middleclass, without thinking about the BOP market. CELTEL dabbled in prepaid cards and transformed many small village traders into business people. The benefit created for the BOP in Africa was enormous. CELTEL employees received training and over-the-market salaries that motivated them to stay in their home countries rather than migrate to Europe. CELTEL also helped the BOP by reducing the cost for communication and travel for farmers and small entrepreneurs; reuniting families pushed apart by local wars; and giving jobs and education to people who could not otherwise access them (Ibrahim, 2012; Klein, 2008).

Honey CARE Africa: Prior to the year 2000, honey producers in Kenya were poor rural farmers working at the mercy of middlemen or intermediaries. At that time, the honey industry was at subsistence levels; farmers were paid late at unfair prices, and the market was corrupt and inefficient. For farmers in the honey business, margins were nonexistent.

When the international NGO CARE entered the market in 2000, honey production had long been controlled by men. By 2006, a new company—Farouk Jiwa—helped change that context. Today, women do 30 percent of the honey business, which, with the

help of CARE partners and other NGOs, has now become profitable. Farouk Jiwa pays the farmers market prices in 48-hour terms. CARE made the connections between the BOP producer and the markets (national and international) and provided training and technology. Honey CARE is now the largest producer of high-quality honey in Eastern Africa (Dossani et al., 2007; Klein, 2008).

**Project Shakti, Hindustan Lever:** A subsidiary of Unilever, the Shakti Project began as a venture to stimulate demand for Unilever products among the BOP. The project started in partnership with rural self-help groups, offering micro-credit and training to illiterate women, transforming them into entrepreneurs. Shakti women receive training in sales and education in personal and oral hygiene; they then become spokeswomen for Unilever through door-to-door sales. By 2005, the Shakti project had extended to 50,000 villages and had 13,000 Shakti-Entrepreneurs reaching 15 million people in rural areas (Klein, 2008).

**Farmacias Similares:** Before Farmacias Similares launched in 1994, Mexico's poor had to get their medicines from the government, which often ran out of stock. At the time, the government was satisfying only 18 percent of the BOP population's need for medicine, and the only other option was extremely expensive medicines sold in private pharmacies. Farmacias Similares was a partial franchise concept that sold generic versions of medicines with expired patents. It opened stores in poor areas with prices that were at least 30 percent lower than those in other stores. In addition, each pharmacy had a medical doctor who offered primary healthcare consultation for only \$ 50.00 Mexican pesos (\$2.00 USD).

Farmacias Similares' arrival changed Mexico's entire drugstore industry. In its

wake, other pharmacy businesses began selling generic medicines and lowered their shelf prices. In nine years, Farmacias Similares has become the largest drugstore chain in Mexico, with 3,400 stores and \$600 million USD in sales. The company serves more than 10 million customers, and is now beginning to serve the middle class as well (Klein, 2008).

**CEMEX:** Francisco Garza, President of CEMEX, the leading cement Mexican company, created Patrimonio Hoy (PH) in 1998. Mr. Garza was concerned because 40 percent of CEMEX cement's users were construction workers with very low income, and CEMEX knew nothing about them. Thus, the company primarily formed PH to understand these customers and determine how it could make them a larger part of its market.

Mexican low-income families are very different from those in the US. Because of the strong economic crises faced by Mexican people in different generations, the "patrimonio"—that is, *the house*, is one of a family's more important assets for two reasons: it doesn't lose its value as rapidly as the local currency, the Mexican peso, and its owners perceive it as solid and enduring. Low-income families build their homes step by step, sometimes on weekends and holidays, and typically as a family activity. These houses are mainly constructed on irregular lands, or *ex-predios*—that is, lands that use to be for farming, but became attached to the cities as they expanded. CEMEX realized it knew little about these construction workers, but that if it could help them grow their patriminios, they could become an important part of CEMEX's market. When the research process was done and the firm understood the specifics about this group, it was time to strategize. CEMEX followed the "Tanda" concept of offering a "group savings

process," in which three families contributed as a team, paying \$11.50 USD per week per family for 10 weeks. Each week, one of the team's three families was randomly chosen to receive the group's money to build their planned room or house extension. CEMEX provided an experienced architect and an engineer to design the room plans for the family. PH also developed "Promotoras," people who were well known and trusted by the community who earned a commission for each family or group they brought into the Tanda. From the start, 90 percent of the Promotoras have been women. CEMEX organizes presentations about the program and the Promotoras bring in candidates. If a family gets behind in its Tanda payment, the Promotoras analyze the situation and make decisions about how to proceed. CEMEX's PH program has helped the firm understand and develop strategies to help a key user of its product, and in turn is helping grow the BOP market's assets and creating higher profits for the company (Klein, 2008; Rangan, Quelch, Herrero, & Barton, 2007; Segel, Chu, & Herrero, 2006).

Table 4 summarizes the examples of documented BOP cases. These firms' experiences show that "the BOP contains a large number of people with a substantial collective purchasing power" (Klein, 2008). These cases also show that, with the right strategy, firms were able to change their businesses to serve the BOP and achieve positive results. Many additional success cases are presented in diverse academic works, including *Business Solutions for the Global Poor: Creating Social and Economic Value* (Rangan et al., 2007).

The five example cases presented here offer some contribution in terms of strategizing the BOP. CELTEL and Unilever's Project Shakti used education as triggers to develop their strategies. CELTEL trained micro entrepreneurs and made them profitable, helping their employees develop the capabilities needed to stay in their homeland and avoid the seemingly inevitable migration to Europe. Project Shakti educated its saleswomen in health issues, and they in turn became educators in the villages they visited and for the families to whom they sold their products. CELTEL exploited technology to reduce the cost to its clients, a strategy also used by Honey CARE, which used information systems to advise farmers about prices and potential buyers. Two firms contributed to strategy in their use of experts on location: Farmacias Similares introduced medical doctors in pharmacy stores for walk-in consultations, while CEMEX supplied an architect and an engineer to help the BOP customers design and build their homes. CEMEX also contributed to strategy by exploiting social networks to create and promote its Promotoras, as well as by developing the group savings and Tanda programs, which reduce the risk of overdue accounts.

Firm	Article	Keywords	Source
CELTEL	"Growing Inclusive Markets"	Mobile telecommunications, Africa	Catheu, 2007
Honey CARE Africa	N/A	Farming, middlemen, food	Branzei & Valente, Richard Ivey School of Business, 2001
Project Shakti, Hindustan Lever LTD (Unilever)	N/A	Rural areas, female entrepreneurs, micro-credit	Ionescu-Somers & Amann, IMD International, 2006
Farmacias Similares	N/A	Low-cost medicines, franchises, entrepreneurs	Chu & Garcia-Cuellar, Harvard Business School Press, 2007
CEMEX	"Patrimonio Hoy"	Cement market, micro- credit, entrepreneurs, housing	Segel, Chu, & Herrero, Harvard Business School Publishing, 2006

Table 4 Examples of firms investing in the BOP

## **III.3** The Assets Hexagon

Almost half the world's population lives in rural regions, and most of those people live in poverty. Such inequalities in human development are a primary cause of social unrest and, in some parts of the world, even violence (*A. P. J. Abdul Kalam*).

Poverty is a concept that extends beyond a lack of liquidity or capacity to satisfy basic needs, and it often has multiple causes (Penh, 2009; Sen, 1999). Still, narrow definitions of poverty also exist, and focus solely on income or purchasing power. It was Sen (1974) who brought new depths to our understanding of poverty. For many years, scholars, practitioners, and firms understood the concept of poverty through Maslow's pyramid. According to Maslow, people could not consider the pyramid's upper echelons without first satisfying their basic needs for food and water. Although this is essentially true, as Sen pointed out in his capabilities framework, individuals require a range of capacities in order to make choices that improve their well-being (Penh, 2009; Sen, 1999). BOP corn farmers in Mexico, for example, lack access to many such capacities, including education. This absence of adequate educational institutions limits the development of farmers and their families.

Penh's Asset Hexagon (Figure 5) shows six assets individuals and their families need to develop and progress. Unlike Maslow's layered pyramid model, the hexagon presents a cyclical process of relationships. The absence of any one asset affects the strength and performance of the others. The hexagon's six assets are: human, natural, financial, physical, social, and political. It does not prioritize any one asset (as in Maslow's pyramid). Instead, it shows how interconnected and interdependent the assets are for the development of an individual or a family.

Mexican corn farmers face a serious shortage of several of these assets, which shapes their way of life and restricts their capacity for success. The hexagon's effect is circular: the absent of one asset affects the existence, permanence, or viability of the rest. Regarding the education asset, for example, rural schools in Mexico have neither the best quality of content nor high effectiveness, in part because they lack quality teachers.

This, in turn, is because the people selected to teach in rural schools are often poorly qualified and spend most of the school year striking and participating in work stoppages to pressure the government for any claim that the union leaders feel entitled to ask, such as wages or budget increase.



**Figure 5 Penh's asset hexagon** 

Political groups and unions control and manage the teaching jobs in rural Mexico. Labor assets are also absent because of the nonexistent financial assets of credit, cash, and wages. Thus, young men and women must leave rural areas to find work, and often migrate to the cities or to the US in search of better income. These financial assets are lacking because institutions, such as banks, have no interest in facing uncollectible accounts due to the institutional voids in Mexico's commercial laws. Trying to collect accounts in the Mexican sierra it is an expensive an almost hopeless task and the authorities try to avoid impounding the scarce assets of the poor people due to the enormous political cost.

BOP corn farmers plant their crops based on the rainy season calendar; they do not have access to waterholes or spring systems. Thus, each year they face uncertainty about the quantity of rain for each cycle—it could be a little or it could be a lot. Most BOP corn farmers own small plots of land. These *ejidos* were distributed to farmers during massive land distribution programs that divided up the large Haciendas after the Mexican revolution of 1910 (Segel et al., 2006). These farmers cannot afford to own mechanical tools and physical assets such as tractors, seeders, sprayers, and harvesters. Accessing raw materials—seeds, fertilizers, and agrichemicals—depends on the farmer's credibility with the local distributor, who offers product on credit. Politicians are largely absent here; they approach BOP corn farmers only when an election is impending. In addition to the lacks from the asset hexagon, the BOP farmers in Mexico face institutional voids in their context. Tarun Khannan and Krishna Palepu from Harvard University in their 2000 paper presented the Institutional voids framework referred to the BOP markets, or as they referred in a more political correct way: the emerging markets. They expressed in their article: "In emerging markets, in contrast (To the United States), there are a variety of market failures. For example, financial markets are characterized by a lack of adequate disclosure and weak corporate governance and control. Intermediaries such as financial analysts, mutual funds, investment bankers, venture capitalists and a financial press are either absent or not fully evolved. Securities regulations are generally weak, and their enforcement is erratic (p. 2) (Khanna & Palepu, 2000). The institutional voids in Mexico are well known by locals, and in particular in the farming context are extremely notorious. As mentioned before, financial players are absent in this industry and the securities regulation presences is ambiguous.

Thus, BOP corn farmers experience shortages in five key areas:

- Human assets: education and labor
- Natural assets: water resources
- Financial assets: credit from financial institutions, savings (and the capacity to generate them), and wages
- Physical assets: seeds and tools
- Political assets: access to political leaders and recourse through a legal system

#### **IV CHAPTER 4: FRAMEWORK**

This section presents an analytical framework developed early in this action research project. Based on DCT, ODS, and BOP theory, the framework offers a perspective on how firms can strategize BOP opportunities in specific markets. This dissertation applies the framework to analyze ANSA's problem-solving cycle, which led to the formation of AgroEstacion, which in turn validates the framework. The empirical findings are then combined with extant theory to suggest propositions for strategizing BOP opportunities.

## **IV.1 Dynamic Capabilities Theory**

Here, DCT is used to detail the main resources of the two key stakeholders— ANSA and the BOP—focusing on physical resources, knowledge resources, and organizational resources. For both stakeholders, these resources fed off knowledge and data and fed into the strategy, which then helped develop and improve the resources' capabilities (Bowman & Hurry, 1993; Sandberg et al., 2014).

In 1997, three researchers—David J. Teece (Haas School of Business, University of California Berkeley), Gary Pisano (Graduate School of Business Administration, Harvard University) and Amy Shuen (School of Business, San Jose State University) published a paper, "Dynamic Capabilities and Strategic Management" (D. Teece, 1997) based on a 1994 effort by Teece and Pisano. In that earlier work, "The Dynamic Capabilities of Firms" (David Teece & Pisano, 1994), the authors introduced the dynamic capabilities concept and a resource-based view of the firm to confront the question of how firms achieve and sustain competitive advantage by building and reconfiguring their internal and external firm-specific capabilities into new capabilities that match their turbulent environment. The term "dynamic capabilities" was first introduced by Gary Hamel and C.K. Prahalad in their paper, "Core Competences of the Corporation" (C. Prahalad & Hamel, 1990). The most relevant initial paper in strategizing through DCT is that of Hamel and Prahalad as it makes detailed analyses of the theory applied to the firms' core and context.

Before the 20th century's final decade, Porter's "competitive forces" approach was the spearhead of business strategizing (Porter, 1979, 2008; David Teece & Pisano, 1994; David J. Teece, Pisano, & Shuen, 1997). Of course, other theories dominated in the business and organizational fields, but academics and practitioners preferred Porter's approach. Porter focused specifically on the context, the industry, the competition, and the ways a firm might gain advantage over its competitors by exploiting factors such as cost and weaknesses in others. Porter's five forces, Game Theory, and other approaches focused on how a firm could manipulate stable elements in its context to attack the competition using a Machiavellian mindset (David J. Teece et al., 1997). However, a void existed in the literature about how firms could strategize to adapt and succeed in turbulent environments. How did managers in unstable environments compete with and gain advantage over their competitors? How did they sustain that advantage? How did they redeploy internal and external competences? Teece, Pisano, and Shuen asked these questions, which motivated them to look inside the firms for an approach that could explain this success in a Schumpeterian mindset (David Teece & Pisano, 1994) where entrepreneurial innovations have an important role as a key driver in economic growth.

Capabilities are a collection of high-level learned, patterned, and repetitious behaviors, processes, and routines that an organization can perform better than its competition (Winter & Nelson, 1982). Dynamic capabilities are the antecedent organizational and strategic routines by which managers alter their resource base—acquire and shed resources, integrate them together, and recombine them to generate new, value-creating strategies (Eisenhardt & Martin, 2000; Grant, 1996). As such, dynamic capabilities complement traditional strategic thinking based on structure and strategic position within an industry. The aim of DCT is understand how firms sustain an advantage over and compete with other firms using dynamic capabilities to face and respond to environmental changes—as well as to create those changes.

In their paper (1997), Teece, Pisano, and Shuen presented three categories for determining a firm's distinctive competence and dynamic capabilities: processes, positions, and paths. A process can be described as "a specific ordering of work activities across time and place, with a beginning and an end, and clearly defined inputs and outputs: a structure for action" (Davenport, 1993; Sandberg et al., 2014). That is, processes are the way things are done, also referred to as *routines*. Dynamic capabilities are identifiable and specific routines; indeed, researchers have described DCT as "routines to learn routines" (Eisenhardt & Martin, 2000). Processes and routines are simply how managers and the organization (as a living organism) do things (David J. Teece et al., 1997). According to Teece et al., organizational processes have three roles: coordination and integration (internal activities coordinated by the firm's managers); learning (the process by which repetition leads to process mastery); and reconfiguration and transformation (adaptation through change in rapidly changing environments). Eisenhardt and Martin outlined dynamic capabilities as the organizational and strategic routines by which firms achieve new resource configurations as markets emerge, collide, split, evolve, and die. Managers create a firm's routines through process design, but culture affects and molds these routines, adding value and making them difficult to replicate (David J. Teece et al., 1997).

*Position* refers to a firm's specific assets, such as specialized equipment or a strategic plant, as well as the knowledge assets that are difficult to trade. Teece et al. described eight asset categories:

- Technological assets, including know-how and protected instruments and intellectual properties
- Complementary assets, related to producing and delivering new products
- Financial assets, including available cash, available credit, access to funds or investors
- Reputational assets, including good historical liaisons with stakeholders as clients, suppliers, banks and public institutions
- Structural assets, including the formal and informal structures of the firm's organization
- Institutional assets, such as laws, rules, and government offices
- Market assets, including distribution network and logistic resources
- Organizational boundaries, that is efficiency, power, competence and identity

*Paths* refer to the mobility in the firm's current functions and the positions (opportunities) ahead (David J. Teece et al., 1997). Paths represent the firm's history and how its managers have addressed objectives and solved problems. These paths are important because they shape and represent the entire repertoire of the firm's routines.

Dynamic capabilities respond differently depending on the nature of the firm's market. In moderately dynamic markets—with stable industry structures, well-defined boundaries, identifiable business models and players, and predictable change-dynamic capabilities such as routines or processes are embedded in cumulative knowledge that, once codified, presents predictable knowledge (Eisenhardt & Martin, 2000; Constance E. Helfat & Margaret A. Peteraf, 2003; Winter & Nelson, 1982). In high-velocity markets in which industry structure and boundaries are unclear, players come and go from, change is unpredictable, and routines are intentionally simple to allow for emergent adaptation (Eisenhardt & Martin, 2000)—knowledge production must be fast to respond to new situations and changes in the context. Researchers have defined dynamic capabilities in various ways, some researchers define them as the capabilities that require firms to adapt and change by building, integrating, or reconfiguring their resources and capabilities (Constance E. Helfat & Margaret A. Peteraf, 2003). A resource is a tangible or intangible asset that a firm owns and can exploit. Dynamic capabilities show how managers use the firm's resources to gain advantage. Accordingly, Eisenhardt et al. defined dynamic capabilities as the firm's processes that use resources-specifically, the processes that integrate, reconfigure, gain, and release resources-to match and even create market change (Eisenhardt & Martin, 2000). According to Helfat et al. (2007), a dynamic capability is the firm's capacity to purposefully create, extend, and modify its resource base (Helfat et al., 2009; Constance E Helfat & Margaret A Peteraf, 2003; J. A. Miles, 2012). Previous scholars and theorist believed that assets were a major contributor to a firm's competitiveness, while more recent theories assert that it is in the resources themselves that the greatest potential strategic contribution resides (David J. Teece et al., 1997). Physical assets such as inventory, buildings, plants, and vehicles can be purchased, while resources must be developed.

DCT helps researchers and practitioners understand which of a firm's resources strongly affect its performance. To create value, such resources must be valuable, rare, inimitable, and non-substitutable (VRIN) (Eisenhardt & Martin, 2000). A firm's competitive advantage flows from the exploitation, evolution, and recombination VRIN and other resources to create new resources. A firm's strategic routines—how things are done and which manager does them—also alter the firm's resource base (Eisenhardt & Martin, 2000).

Following our first research stage (2014), our team used this resource view as a foundation for building the Integrated Model, which identifies three types of resources—physical, knowledge, and organizational—that a firm and the BOP network (local distributors) can exploit.

ANSA's resources provide the foundation for the collaboration:

- Physical resources, including assets such as warehouses, logistical equipment, a chain of stores, and IT equipment
- Knowledge resources, including 37 years of experience in the field and knowledge about technology (crops and products) and the market
- Organizational resources, including employees, a suppliers network, and a financial network

The BOP network of local distributors adds to this collaboration:

• Physical resources, including the agro-shops located in the farmers' vicinity

- Knowledge resources, such as local market information and customer data
- Organizational resources, including proximity to farmers and existing relationships with them

# **IV.2 Option-Driven Strategizing**

ODS brings a dramatically new view of uncertainty. Rather than merely outlining a specific path, *options* reflect incremental decision-making about resource investments to frame future actions (Bowman & Hurry, 1993; Timothy A. Luehrman, 1998; Sandberg et al., 2014). ODS recognizes that, in some situations, uncertainty is good, and helps us understand that the greater the uncertainty, the greater the opportunity for value creation (Faulkner, 1996). Effective options thinking requires managers do three things well (Fichman, Keil, & Tiwana, 2005):

- recognize and enhance opportunities to create options,
- value those options in some way, and
- manage projects in a way that fully extracts this value

ODS is a valuable tool for practitioners, because it helps them value the impact of diverse strategies. Some strategy researchers suggest that corporate decisions typically have two stages. First, the firm makes a small investment to test the water and thereby earn the right to participate in the project. Bowman calls this stage the "purchase of the option." Once data is collected and the firm fully understands the project, it then makes a second and larger investment, "exercising the option" (Bowman & Moskowitz, 2001). This is similar to when poker players pay to see a rival player's cards.

Despite the theoretical attractiveness of the options approach, its use by managers appears to be limited (Bowman & Moskowitz, 2001). Most managers prefer more analytical tools—such as net present value (NPV), to obtain the overall values of incoming and outgoing cash flows over time, and return of investment (ROI) to calculate the investor's benefit—because they are focused on what Fichman et al. (2005) called the "must do" elements and forgetting to consider those that a firm's "may do." Some researchers and practitioners do not like using tables or decision trees, preferring instead to use software applications. However, tables and decision trees offer advantages over decision software, including that they make counterintuitive outcomes more visible and understandable (Faulkner, 1996). Strategies are produced through the sequential elimination of items in an option chain (Bowman & Hurry, 1993). In this chain, sequential steps operate as filters, diluting the options set until an adoptable option is found. Moreover, sometimes new options rise from this diluting process (see Figure 6).

Option chains support a systematic search for opportunities beyond the baseline implementation (Fichman et al., 2005). Once the chain is filtered to include only viable options, managers can classify and further dilute the set of opportunities that remain.

Options in the options chain are classified in six ways:

- Shadow option: An option that awaits recognition, but has not been yet identifiable
- Available option: An option in the bundle that it is identifiable and awaits recognition
- Real option: An option in which the firm makes a small investment to obtain preferential access to future investment

- Actionable option: An option that has been analyzed and found to be both desirable and feasible
- Struck option: An option that is activated through a larger investment
- Realized option: An option that has been exercised

The option set rises from an organization's resources, capabilities, and experiences with previous investments. For an option to exist in a firm's context, resources and capabilities must first offer future opportunities, as Figure 6 shows (Bowman & Hurry, 1993).



Figure 6 The options chain

Learning plays a strategic part in this process: organizational learning brings with the set of organizational historic moments a list of future actions, because options acknowledge managerial flexibility to act in ways that avoid potential losses while preserving potential gains. A project with an embedded option is more valuable that one without (Fichman et al., 2005).

Using ODS is advantageous because it helps firms in the process of identifying and evaluating opportunities by increasing the number of considered options (Bowman & Hurry, 1993) and changing how managers view non-options, which can then be transformed into available options in some cases.

# **IV.3** The Integrated Model for BOP Strategizing

Based on our early findings using DCT and ODS, we created the Integrated Model for BOP Strategizing (Figure 7). We followed a process in which we collected data and analyzed it iteratively with the purpose of identifying options that were available, actionable, and realizable through the process of sensing, seizing and reconfiguring (David J Teece, 2007). *Available* options are potential strategies relevant for the firm's opportunities that were dormant and awaiting recognition. In DCT terms, they can be identified through *sensing* new opportunities as an activity similar to scanning, creating and learning, interpreting the outcomes. *Actionable* options are those that the firm might be able to exploit. They can be articulated through *seizing*, which refers to developing the sensed new opportunities (technological or market) into possible products, processes or services. *Realized* options are those already exercised or those to be implemented, by the firm based on their expansiveness, profitably, and ability to quickly achieve the desired outcomes. They can be developed in DCT terms through

*reconfiguration* as the identification, judicious selection and calibration of technological and market opportunities through the selecting of technologies and products attributes, and the design of the business model and commitment of resources to invest in opportunities that would lead a firm to growth and profitability (Bowman & Hurry, 1993; Sandberg et al., 2014; David J Teece, 2007). Through this options lens, and actions undertaken we obtained a view of the organization and the stakeholder's resources as a bundle of options (Bowman & Hurry, 1993; Fichman et al., 2005; Sandberg et al., 2014).

# Strategizing Value Co-creation with BOP



# Figure 7 Integrated Model for BOP Strategizing

Our model has three iterative steps:

1. Define the strategy's goals. Managers can facilitate strategy design by using additional theoretical framings. Any chosen framework must help managers achieve a sufficient understanding of the context and circumstance in which the strategy is being created. At ANSA, for example, we supported our framing by using the Asset Hexagon (Penh, 2009) to better understand the BOP context. At

this stage, ODS is extremely useful because it helps decision makers enlist, understand, and choose the strategy's realizable options.

- 2. Use DCT to identify, classify, and enlist resources. Resources must be classified as either knowledge, physical, or organizational. Further, firms must identify how they are going to develop, reconfigure, and deploy these resources to meet the new goals (Cazares et al., 2015; Eisenhardt & Martin, 2000; Hernandez, Quinonez, & Mathiassen, 2014; Tashman & Marano, 2009; David J Teece, 2007; David J. Teece et al., 1997). Once a firm accounts for it's own resources, it must then account for the resources of anyone in its network that it wants to strategize with to co-create value. The firm's network includes the complete set of stakeholders: suppliers, clients, financiers, stockholders, and so on.
- 3. Analyze the available options. These options are those that arise from the data gathered, using ODS theory to dilute the options from available options to actionable options and finally to realized options, through the actions of sensing, seizing and reconfiguring.

#### V CHAPTER 5: RESEARCH METHODOLOGY

The world is a much bigger lab —Donald A. Wollheim

In the real world, private firms face needs that demand fast solutions from investigators, who must nonetheless maintain a rigorous academic structure to ensure their support is appropriate and rooted in evidence. To facilitate this, business, organizational, and management research must be embedded in stakeholders' reality; as Andrew H. Van de Ven (Van de Ven, 2007) put it, *"Engagement is a relationship that involves negotiation and collaboration between researchers and practitioners in a learning community; such a community jointly produces knowledge that can both advance the scientific enterprise and enlighten a community of practitioners"* (p. 6). Our team's research was conducted according to the engaged methodology of action research, with the goal of being as involved as possible with the firm and its stakeholders through direct engagement with practice (Mathiassen, 2002). Hence, we aspired to create scientific knowledge, while at the same time seeking solutions to or improvements in real-life practical problems (Elden & Chisholm, 1993; McKay & Marshall, 2001).

This dissertation involves the initial design of AgroEstacion through the first part of the action research engaging with stakeholders—that is, the firm, local distributors, and BOP corn farmers—in the corn production process in Mexico's western, central, and southern states. Drawing on DCT, we identified the stakeholders' physical, knowledge, and organizational resources, and analyzed them through the ODS lens in order to select the realizable ones. Based on the first stage of our research, in which we collected data (starting in May 2014), we published an article on our early findings and recommendations to the firm (Cazares et al., 2015). This dissertation also includes the second stage of our action research: strategizing, developing, and implementing the AgroEstacion project as a new franchise business. AgroEstacion, which was *crafted* according to industry requirements and the Mexican context, will co-create value among the three main players:

- ANSA and its AgroEstacion subsidiary,
- a network of selected local distributors, and
- the BOP corn farmers

In the research's first stage, we revealed key resources across the stakeholder network and classified a set of available options for value co-creation. ODS helped us decide which options could be made actionable and eventually realized (Constance E. Helfat & Margaret A. Peteraf, 2003). These early findings allowed us to propose the conceptual model for strategizing BOP value co-creation combining DCT with ODS (Figure 7). Our Integrated Model has two main poles: the firm, with its physical, knowledge, and organizational resources; and the BOP network, with its complementary set of physical, knowledge, and organizational resources (Cazares et al., 2015).

The second stage will continue the practical work of implementing AgroEstacion jointly with ANSA and its select local distributors, and targeting BOP corn farmers. In this process, I will apply, validate, and further develop our proposed conceptual model (Figure 7). Hence, this dissertation will leverage this two-stage collaboration at ANSA to provide knowledge and guidance that firms can use to build and improve their collaboration with the BOP in a way that not only increases their market share and produces more profit, but also builds knowledge and social value that improves the lives of its allies and the BOP community (Klein, 2008).

Working closely with practitioners in the environment in which they collaborate and face daily problems challenges us to seek applicable solutions using the firm and the real world as our laboratory (Baskerville & Wood-Harper, 1996). Action research guides us to comprehend the context and the changes needed to apply BOP thinking to business practice. Action research also puts us closer to the stakeholders' mindset, and helps us better understand it.

## V.1 Collaborative Practice Research

"[Action research] aims to contribute both to the practical concerns of people in an immediate problematic situation and to the goals of social science, by joint collaboration within a mutually acceptable ethical framework." —Robert N. Rapoport (1970: 499)

As action researchers, we both take action and create knowledge (Coghlan & Brannick, 2014). This research applies Collaborative Practice Research (CPR) (Mathiassen, 2002), a form of action research aimed at groups of people; the goal is to achieve social or professional change in their practices by working in partnership with each other (David Coghlan, 2014). The pragmatic axis of this type of action research is change, based on the mutual benefit of people working together with different but complementary knowledge, skills, and responsibilities. In our study, the dissertation author and primary researcher serves as an advisor and enabler for the firm's top executives: the President, CEO, the Chief Commercial Officer (CCO), board members,

the task force team, and ANSA managers, as well as for select distributors for the AgroEstacion project.

CPR emphasizes the co-creation of knowledge, bringing together researchers with different approaches facilitates knowledge creation for stakeholders. The first research stage included the dissertation author and people from different industries with diverse expertise. One held a top position at CARE, an NGO that provides aid to emergent markets, especially in rural areas, and who had deep experience in the agricultural sector of poor countries. Another held a vice-president position at a top private university in Mexico, and was deeply engaged with the BOP literature. The third was the dissertation advisor, a professor whose expertise focuses on action research and other specific organizational theories. It was a group "whose aspirations were for group of people to achieve social and professional change through working in partnership with each other, sometimes including external aid" (David Coghlan, 2014).

In the first stage, the research team reviewed cases in the literature about firms engaged in the BOP market and BOP strategizing. Three examples made particular sense in the context of our investigation: CEMEX (Segel et al., 2006), Kenya's microfranchising model (Kistruck, Webb, Sutter, & Ireland, 2011); and Bangladesh's commercial networking through entrepreneurial women (McKague & Siddiquee, 2014). Theses cases offered insights into the path that the research team was visualizing. After discussions on framing lenses, we selected DCT, ODS, and the Asset Hexagon framework to develop our research. We initiated the first stage in late April 2014, when we conducted a GSU workshop that presented a collaboration proposal to ANSA's four top executives:

- The company's president and founder, a 68-year-old agronomist engineer with 44 years' experience in the agrichemical business
- The CEO, a 56-year-old agronomist engineer with 32 years' experience in the agrichemical business and 22 years' experience working at the firm
- The CCO, a 40-year-old agronomist engineer with 20 years' experience working at the firm
- The CBO, a 43-year-old business major with an MBA with 24 years' experience in the industry; he is also the dissertation author and a member of the research team

In this first workshop, we established trust and commitment. ANSA's executives accepted our research team's proposal on the premise that: *"Change needed to be made, as we cannot keep doing business as usual"*(Cazares et al., 2015). The workshop revealed a list of challenges, which in turn encouraged the research team to produce a series of available strategic options for ANSA. The most critical challenge was the intention of several of the firm's MNC suppliers to shorten the supply chain, thereby bypassing the firm. Two other challenges also put the firm's sustainability at risk:

- Some of the firm's distributors who were once small local businesses had become medium-sized firms, with a heavy and influential presence. That is, they were "Ants becoming Elephants" (Cazares et al., 2015)
- Other distributors had no credit options, as financial institutions were absent from the farming business in Mexico

From these challenges, the research team applied ODS to draw up a list of options:

- Develop a BOP–MNC joint venture (JV). With this option, ANSA aspired to reduce the uncertainty the MNCs had about the firm's participation in the market and also to shorten the supply chain
- 2. Design special agrochemical packaging for the BOP farmer. The firm identified the need for smaller packing of agrichemical solutions to better suit BOP farmers
- 3. Identify strategies for engaging BOP farmers. The firm understood its lack of presence in the minds of BOP farmers and the importance of changing this
- 4. Develop tools to help BOP farmers self-organize. Such tools could include information centers; information tools, such as media; community centers; and workshops. A joint effort between ANSA and its local distributors in this area could give the firm access to many BOP farmers and help them use the tools to transfer knowledge and technology to them
- 5. Establish a joint effort of ANSA and local distributors to target BOP farmers. The firm has more than 1,350 distributors in its network, an important resource that gives it a strong market position. The opportunity here would be to engage with distributors who were searching for a strategy to target the BOP farmer
- 6. Develop a franchise business model, also in a joint effort with select local distributors, to target the BOP farmers

Aided by constant communication with ANSA's executives, the research team applied ODS to dilute the options set from available to actionable opportunities (Table 5). Then, to further reduce the set to realizable options, the research team interacted with the firm's stakeholders: the MNC suppliers, the local distributors, BOP farmers, the firm's regional managers, sale representatives, administrative personal, and industry experts. ANSA was and is committed to this process for both pragmatic and principled reasons. The pragmatic arguments are based on a strategic desire to achieve change in the business (David Coghlan, 2014), while the principled arguments express a particular set of beliefs about how change in social settings should be achieved and about the power people gain by working together (David Coghlan, 2014).

Our research team performed open interviews through its two Spanish-speaking members, as well as in workshops and focus groups where the options were discussed, polished, and improved. We also spent two days traveling and visiting the fields, where we interviewed farmers. In addition, we visited small town stores and interviewed local distributors, as well as conducting interviews with MNCs' managers. We heard complaints, criticisms, and suggestions that further illuminated our strategy development. As we continue this research, we will follow-up on this knowledge cycle with interviews and focus groups with stakeholders to capture recent developments and validate data from our previous analysis. Action research has been criticized for lack of rigor, but we believe it is one of the more engaging approaches, providing rich insights into the real-world problem setting (McKay & Marshall, 2001). To accomplish rigor in this process, our CPR follows Robert Burns' 1994 dual-cycle approach (Burns, 1990) as adapted by Judy McKay and Peter Marshall in 2001 (McKay & Marshall, 2001).

#### Table 5 Options available in ANSA

Initial Set of Options	Revised Set of Options
1. Develop a BOP joint venture with select multinational suppliers	
2. Offer specific products and services to BOP farmers	1. Offer specific products and services to BOP farmers
3. Identify strategies for engaging BOP farmers	
4. Develop tools for BOP self- organization (information centers, community meetings, workshops, and so on)	2. Identify strategies for engaging BOP farmers
5. Provide support for helping distributors target BOP farmers	3. Provide support for helping distributors target BOP farmers
6. Develop a franchise model targeting BOP farmers	4. Develop a franchise model targeting BOP farmers
	5. Support commercialization of BOP produce (buy and develop wholesale markets)

## V.2 The Dual-Cycle Approach

Our action research follows the dual-cycle approach suggested by (McKay & Marshall, 2001), which emphasizes the problem-solving interest, the research interest, and the ongoing interactions between them, as Figure 8 shows (Chiasson, Germonprez, & Mathiassen, 2009).

The first part of our research yielded practical outcomes: the initial design of a new business platform, AgroEstacion, that would strength the presence of ANSA in the market, improve the business process of the local distributor, and push benefits (technological, financial, commercial) to the BOP corn farmers. At the same time, this initial stage also yielded preliminary theoretical results: the Integrated Model for strategizing BOP business options (Figure 7). During our initial research, the problem-

solving cycle consisted of four phases; the problem-solving cycle in the research's second stage will also include four phases (see Table 6).



Figure 8 Problem solving and research cycle in action research

Our problem-solving cycle began in March 2014 with a debate about ANSA's challenges and possible opportunities, and a review of several cases in which firms had successfully entered the BOP market and made an economic, financial, and social difference. In April 2014, the research team organized the first workshop with ANSA executives, which was aimed at engaging the researchers and practitioners in a cross-knowledge process and designing a list of available options. The first column in Table 6 lists the options discussed in that workshop. As noted earlier, our research team challenged the executive team to adjust their mindsets and explore BOP opportunities in their industry. We called this first problem-solving phase, "Committing to BOP Strategizing." Then, in the second phase, "Identifying Available Options," we discussed the firm's challenges and opportunities and designed available BOP options. Next, we

began the data collection process. From July 16–20, 2014, we interviewed farmers, distributors, and ANSA personnel; we also interacted with the executive team, and held focus groups with managers from ANSA and two of the firm's suppliers. This third phase, "Interacting with the Firm and the BOP network," consisted mostly of collecting, analyzing, and reducing data, following Miles and Huberman's data analysis approach, including the iterative steps of data reduction, data display, and conclusion drawing (Chapter 6 has more details on this).

In phase four, "Developing Actionable Options," our research team continued meeting with our advisor, and we held a focus group with ANSA executives in which we developed actionable options. It was in this phase—during a workshop at ANSA headquarters—that we developed our Integrated Model for BOP Strategizing (Figure 7). Following this new model led our team and the practitioners to select the microfranchising approach as a major option for the BOP strategy.

# Table 6 The problem-solving cycle phases

Problem-Solving Cycle Phases			
1. Committing to BOP strategizing	<ul> <li>Exploring strategic and ethical business issues within ANSA</li> <li>Conducting a workshop with ANSA executives</li> <li>Discussing ANSA's history and its current situation, challenges, and sensing opportunities</li> <li>Discussing the BOP proposition and cases</li> </ul>		
2. Identifying available options	<ul> <li>Conduct workshops and Skype meetings with research and Executive team</li> <li>Analyze ANSA challenges and sense opportunities</li> <li>Identify available BOP options</li> </ul>		
3. Interacting with ANSA and the BOP network	<ul> <li>Collect data and sense-analyze/dilute options</li> <li>Conduct workshops with Task force and customers</li> <li>Interact and discuss with executive team</li> </ul>		
4. Developing actionable options	<ul> <li>Conduct workshops with research team, executive team and task force</li> <li>Develop/seize actionable options</li> <li>Conduct workshops with ANSA executives</li> <li>Select/reconfigure major option (micro-franchising)</li> </ul>		
5. Crafting AgroEstacion	<ul> <li>Transform task force into AgroEstacion team</li> <li>Design AgroEstacion business franchise concept and select distributors for partnership</li> <li>Design AgroEstacion plan, including processes, models, and manuals</li> <li>Beginning of initial training process for franchisees (downstream)</li> <li>Sign bailment contract (equipment)</li> <li>Handle legal issues (registration, contracts, and trademarks)</li> <li>Build the model store in Tlajomulco town.</li> </ul>		
6. Strategizing process options	<ul> <li>Design the commercial and cross-learning processes (for the firm and franchisees)</li> <li>Conduct follow-up workshops with the research and AgroEstacion teams</li> </ul>		
7. Engaging franchisees	<ul> <li>Launch first two franchise stores</li> <li>Initiate the second training process for franchisees</li> <li>Design the Growth Forum</li> </ul>		
8. Networking for expansion	<ul> <li>Develop the Executive Advisory Board</li> <li>Introduce the AgroEstacion business model to suppliers and governmental officials</li> <li>Scout candidates for the next two franchisees</li> </ul>		
The first stage of our research concluded in December 2014. We detailed our findings in a preliminary article, "Strategizing Value Co-creation with Poor Farmers in a Mexican Agribusiness," by Rafael Hernández Cazares, Late M. Lawson-Lartego, Sergio Quinonez, and Lars Mathiassen. Our second research stage launched as our first stage ended—in December 2014—when we decided to continue our action research to further develop our Integrated Model and realize the selected options.

As in our first stage, this second action research stage also consists of a fourphase problem-solving cycle. In phase one, "Crafting AgroEstacion," we transformed the task force into AgroEstacion's management team; these team members now work fulltime for the project rather than continuing to divide their time between ANSA's previous activities and AgroEstacion. The dissertation author supervised the development of this new team, which worked with the research team to design the firm's business franchise concept and select two distributors with which to partner. In this phase, we also designed the new company's processes, business model, and manuals, beginning with the training process for the two selected distributors. Also in this phase, ANSA provided equipment—including furniture, computers, printers, and satellite-based Internet access—to those distributors. In this fifth "crafting" phase, the creation occurred: the new business entity took a solid, organized form that distributors, suppliers, farmers, and other stakeholders can see.

In the sixth phase, "Strategizing Process Options," we exchanged knowledge between the two franchisees and AgroEstacion's managers team about the corn commercialization process. That process included the crop contract process, the farmers' fund application process, and the buyer contact process. In this phase, knowledge sharing played a key role; in Figure 7, we illustrate this through the "Informs/Develop Route" where arrows cross between the "Firm Network," "BOP Network" and "Strategizing" boxes.

In the seventh phase, AgroEstacion engaged with its franchisees, by inaugurating the first two stores in September 2015. The franchisees' personnel participated in the second training process, and we launched the first Growth Forum (*Foro De Crecimiento*), designed to engage the franchisees, AgroEstacion, and other stakeholders in a deeper cross-knowledge practice. In the Growth Forum, participants exchanged knowledge and experience, such as franchisees' diverse challenges and how they faced them. Further, facts were analyzed with the goal of improving AgroEstacion's performance in terms of its products and services for farmers and franchisees—including farmer experiences and needs, franchisee experience and operations, partnership evaluation and improvement, and agronomic updates.

In the eighth phase, the research team and the practitioners began a networking procedure aimed at expansion. We planned to develop an Executive Advisory Board, led by ANSA's board president and confirmed by including the top executives from two MNCs allied with ANSA, a government official in the agricultural sector, business people from the agricultural industry, two financial officials from banks interested in the agricultural industry, a financial advisor, and a business college professor. The Advisory Board's objective will be to engage people with deep knowledge in the business and wide networks, so they can contribute experience, knowledge, and social networks to the new company. We also planned to scout for the next two franchisees candidates in this last phase, following the path we hiked to choose our initial franchisees.

As Figure 8 shows, research and problem-solving cycles constantly interact, which creates an effect in which one cycle impacts the other (Chiasson et al., 2009). The research cycle is focused on the scientific goals and the researcher's aspiration for knowledge. It is the cycle in which research team members expect to solve problems and add new knowledge (as Table 1 shows). In the first stage of our action research, we contributed to knowledge by combining DCT, ODS, and the Asset Hexagon into an Integrated Model (Figure 7). In the second stage of our action research, we're seeking to contribute knowledge by presenting a detailed process and propositions for strategizing the BOP market to co-create value, "contributing to knowledge differently from what positivist science can contribute" (Susman & Evered, 1978). Table 7 summarizes the key events of our research cycle.

Research Stage	Research Activities
Action Research: Stage 1	<ul> <li>Introduce the BOP literature</li> <li>Review select BOP cases relevant to the firm</li> <li>Introduce theoretical frameworks: Dynamic Capabilities Theory (DCT), Option-Driven Strategizing (ODS), and Asset Hexagon</li> <li>Begin action research</li> <li>Collect data</li> <li>Apply ODS theory</li> <li>Design the Integrated Model for BOP Strategizing</li> <li>Conclude first action research stage and write/publish preliminary findings</li> </ul>
Action Research: Stage 2	<ul> <li>Apply Integrated model to create a new entity</li> <li>Follow-up on data collection to validate and capture recent developments</li> <li>Conduct detailed analyses of all data from both action research stages</li> <li>Develop a comprehensive empirical account</li> <li>Further develop the model and propositions</li> <li>Draw conclusions</li> </ul>

 Table 7 Research cycle activities

#### **VI CHAPTER 6: DATA COLLECTION AND ANALYSIS**

#### VI.1 Data Collection, Stage One

In the first research stage, the goal of data collection was to help the executive team develop and implement a sustainable strategy targeting the BOP, as well as to develop new empirical insights into how managers might strategize the co-creation of value with the BOP. In that first stage, we collected data through three workshops with ANSA executives; 24 semi-structured, in-person interviews; a focus group with key stakeholders in ANSA's value chain; and field trips to rural areas in Mexico's western states, where we visited the distributor stores and interviewed BOP farmers.

The research team met every two weeks to review data and share experiences. In addition, the total commitment of the firms' executives meant that we had full access to secondary data through internal communication documents, including financial information, sales reports, supplier comments, the distributor and farmer network database, company presentations, emails, notes from informal meetings, and other written materials. These materials complemented our understanding of the problem and validated our initial conclusions. Data collection for this first stage of action research began in our first workshop with ANSA executives at Georgia State University in Atlanta. We subsequently held two more workshops with the same executive team and a focus group with ANSA managers and the newly created task force. Table 8 summarizes this initial data collection process, which we conducted from March through December 2014.

### VI.2 Data Collection, Stage Two

In the second stage of this action research, I collected qualitative data from primary and secondary sources. Because I had a dual role in this project—as researcher and practitioner—I had access to all the data that was produced at ANSA and most of the data from secondary sources. Data collection began in early 2015, when I began actively observing and taking notes during relevant AgroEstacion meetings. I also conducted interview and focus group follow-ups with people participating in the first action research stage. The goal of these follow-ups was to validate key findings from the original interviews and focus groups and to add new details about the latest developments in ANSA's strategy for co-creating value with its customers.

I observed and documented two types of formal meetings: those that AgroEstacion managers and ANSA executives held with indirect project suppliers including lawyers, architects, construction engineers, and IT experts—and those of the board of directors, when the discussions related to AgroEstacion. Finally, I used ethnographic methods to capture additional information by observing participants, which typically produces the most interesting and evocative accounts of organizational life (Van Maanen, 2011). I began collecting this out-of-schedule data (OSD) in January 2015, exploiting the opportunity I had due to my full-time participation and onsite presence at ANSA. However, I conducted no interview or focus group follow-ups until September 2, 2015, when I received authorization by GSU's Institutional Review Board (IRB). Table 9 summarizes my data sources and collection methods for the second action research stage.

Primary	Secondary
<ul> <li>Workshops with ANSA executives (3)</li> <li>Research team meetings to analyze workshop material and advances (bi-weekly)</li> <li>Focus group with middle management team</li> <li>Semi-structured interviews: <ul> <li>Farmers (10)</li> <li>Distributors (6)</li> <li>Regional managers (3)</li> <li>Suppliers' executives (2)</li> <li>Industry experts (1)</li> <li>Potential partners (2)</li> </ul> </li> <li>Staff meetings: <ul> <li>Task force recruiting</li> <li>Legal consultancy (2)</li> <li>Business plan (5)</li> </ul> </li> <li>Field observations: <ul> <li>Store layouts</li> <li>Warehouse operations</li> </ul> </li> </ul>	<ul> <li>ANSA documents:         <ul> <li>Market and industry information</li> <li>Sales reports</li> <li>Distributors' data</li> <li>Farmers' data</li> </ul> </li> <li>Research team documents:         <ul> <li>Available strategic options</li> <li>Actionable options</li> <li>Work plan for task force</li> </ul> </li> </ul>

# Table 8 Data sources for the first stage of action research

This second stage of data collection focused on documenting data related to the last four "realizable options and seizing action" that our team developed with AgroEstacion:

- Crafting AgroEstacion
- Strategizing process options
- Engaging franchisees
- Networking for expansion

The process of documenting how these four phases developed provided primary and secondary data, which we documented through observing participants and conducting follow-ups as described above.

### VI.3 Data Analysis

To analyze the project's voluminous data, I used a filter suggested by Miles and Huberman (2013) for qualitative data analysis (Figure 9). This qualitative data analysis consisted of three activities: data reduction, data display, and conclusion drawing and verification (M. B. Miles, Huberman, & Saldaña, 2013; Singh, 2011). As noted earlier, my goal in collecting and reducing this data was to use our theoretical framework to understand the context and the factors contributing to ANSA's challenges (Table 1). This process was continuous, and did not work in a strictly flat timeline. Given this, I began collecting data before I completed my dissertation abstract and continued collecting data even as I began writing up the results section. In action research, you become an observer as well as a passenger on the journey. Nonetheless, I ultimately stopped gathering data in mid December 2015.

Primary Data Sources	Secondary Data Sources
<ul> <li>Follow-up interviews: Executive team (3)</li> <li>Observe quarterly board meeting (1)</li> <li>Follow-up interviews: AgroEstacion staff (4)</li> <li>Follow-up interviews: Distributors who became AgroEstacion franchisees (2)</li> <li>Follow-up interviews: select focus group participants (1)</li> <li>Researcher workshops (3)</li> <li>Observe legal meetings (2)</li> <li>Participant observations: Distributor's business operation following ANSA business process training (various)</li> </ul>	<ul> <li>Internal documents and events:         <ul> <li>Meeting notes</li> <li>E-mails and memos</li> <li>Sales reports</li> <li>Hallway meetings</li> <li>Business plans</li> <li>Legal documents</li> <li>Funding applications and presentations</li> <li>AgroEstacion memos</li> <li>Ethnographical note taking (observation/reflection)</li> <li>Business Plan presented by AgroEstacion general manager</li> </ul> </li> <li>External documents:         <ul> <li>Practitioners Journals</li> <li>Informal discussion with suppliers and industry experts</li> </ul> </li> </ul>

### **Table 9 Primary and secondary data sources**

As described earlier, the second part of the action research focused on two key tasks: gathering and analyzing data from the problem-solving cycle's four last phases (Table 7) and documenting the process throughout those phases. As Figure 9 shows, I created reports **for each phase**, beginning with what Miles, Huberman, and Saldaña called the *data reduction* process (M. B. Miles et al., 2013).

**Data reduction.** I started data reduction at the beginning of the project by designing both a research question and problem context description that focused on the essence of the research itself. Thus, when I paid attention to a problem—in this case, the company's problem—the process of collecting and reducing data began. To reduce the data, I retained only data that confirmed my field notes and initial records (M. B. Miles et al., 2013).

Data collection began immediately, in the first workshop we held with ANSA executives in 2014, in which our research team outlined the firm's context and problems. Data collection continued when the task force presented the early research outcomes to the firm's stakeholders and distributors, and we took notes on their reactions, comments, and opinions. The final four phases of the problem-solving cycle were designed through a joint effort between me, my dissertation advisor, and AgroEstacion's managers.



Figure 9 The research project's approach to data analysis (Singh, 2011)

My first step to reduce the data was to review all the data collected and discard any information unrelated to the research. This included meeting notes on issues unrelated to the research topic and AgroEstacion, as well as data collected that did not qualify as a participant observation or a follow-up, in keeping with the boundaries established by GSU's IRB. Because action research provides numerous opportunities to collect data, researchers must protect the involved individuals and respect the limits provided (in this case) by the IRB.

I translated the notes from the initial workshops, the audios of the interviews and focus groups from the first stage and the follow-ups, and the notes from the second stage of participant observation from Spanish to English and uploaded them into the NVivo software. Then, after reducing the data, I copied it—along with emails and memos from the second stage into separate files in NVivo to facilitate easier access and control.

Data files	Codes	
<ul> <li>Internal</li> <li>ANSA employees interviews</li> <li>BOP distributors interviews (with follow-ups)</li> <li>BOP farmers interviews</li> <li>Industry experts interviews</li> <li>Lawyers meetings</li> <li>Research team members /</li> <li>Suppliers interviews (with follow-ups)</li> <li>Task force members interviews (with follow-ups)</li> <li>Top Management Team interviews (with follow-ups)</li> <li>External documents</li> <li>Emails and memos</li> </ul>	<ul> <li>Resource</li> <li>BOP network         <ul> <li>Knowledge</li> <li>Organizational</li> <li>Physical</li> <li>Firm network</li> <li>Knowledge</li> <li>Organizational</li> <li>Physical</li> </ul> </li> <li>Organizational         <ul> <li>Physical</li> <li>Sensing available options</li> <li>Seizing actionable options</li> <li>Seizing actionable options</li> <li>Seizing actionable options</li> <li>Reconfiguring realized options</li> </ul> </li> <li>Value co-creation</li> <li>Problem-solving cycle phases</li> <li>Committing to BOP strategizing</li> <li>Identifying available options</li> <li>Interacting with firm and BOP network</li> <li>Developing actionable options</li> <li>Strategizing process options</li> <li>Engaging franchisees</li> <li>Networking for expansion</li> </ul>	

# Table 10 NVivo structual map

After uploading the data for both stages, I proceeded to create *nodes*. I created five nodes and 19 subnodes, reflecting the Integrated Model (see Figure 7). Next, I reviewed the transcriptions of the reduced data and manually coded the information. I also selected phrases and statements relevant to my research objectives and classified

them into specific nodes. Table 10 summarizes the filing and coding structure of my NVivo project, which helped me with both data reduction and data display. Table 11 elaborates on the structure, describing the specific codes used in my data analysis; explaining the domain, location, and definition of the codes; and pointing to references supporting the codes.

Based on the results of reducing data from my two research phases, I designed what Miles, Huberman, and Saldaña call the *data display* (M. B. Miles et al., 2013) as Figure 9 shows.

**Data display.** To present my research findings, I narrated the research events, supporting them with the phrases and statements coded in NVivo; based on this I created tables and charts that organized the information and helped me draw conclusions, which, in turn, helped me seize upon the actionable option of developing a new entity: AgroEstacion. I presented the results in chronological order in a diary format, telling the story of each of the problem-solving cycle's eight phases. According to Miles, Huberman, and Saldaña, "Display is an organized, compressed assembly of information that allows conclusion drawing and action." (p. 12) My data collection display includes tables, graphs, and flow charts that serve as a visual tool to help me both identify and explain the details in the dissertation's results section. This part of the data analysis process was crucial to helping me draw conclusions about the project.

**Conclusion drawing.** According to Miles, Huberman, and Saldaña, *conclusions* include noted patterns, explanations, causal flows, and propositions (M. B. Miles et al., 2013). The authors underscore the importance of holding these conclusions lightly and maintaining skepticism; the goal in so doing is to be a competent researcher. Also, it is

vital to develop conclusions in a continuous manner, because some conclusions may not appear until after the data collection process is complete (Figure 9).

Thus, I have been drawing conclusions since the end of the first stage of action research (which produced AgroEstacion) and throughout the second stage, when I began to analyze the outcome, challenges, and actions taken by the project participants. I stopped collecting data in the second week of December 2015 and began finalizing the empirical analysis and conclusions at that time.

Domain	Location	Definitions	References
Resource	• Firm Network	<ul> <li>The set of firm and upstream resources that can be activated in the value co-creation process. These resources can be physical, knowledge, and/or organizational.</li> <li><i>Physical</i>: Tangible assets, complementary assets, financial assets, and market and structural assets, including warehouses, logistic equipment, IT equipment, and capital.</li> <li><i>Knowledge</i>: Know-how, abilities, routines, processes, procedures, and tacit and explicit knowledge that is not easily duplicable and imitable; examples include 38 years' industry and market experience, and business and commercial processes.</li> <li><i>Organizational</i>: Formal and informal structures and processes to delegate authority and responsibility for asset allocation; examples include employee, supplier, financial, and customer networks.</li> </ul>	• (Barney, Wright, & Ketchen, 2001; Cazares et al., 2015; Hernandez et al., 2014; Tashman & Marano, 2009; David J. Teece et al., 1997)

# Table 11 Code domain table

	• BOP Network	• The set of physical, knowledge, and organizational resources (described above) available to the BOP distributors and farmers that can be activated in the value co-creation process.	
Option	<ul> <li>Available options (AVO)</li> <li>Actionable options (ACO)</li> <li>Realized option (REO)</li> </ul>	<ul> <li>AVO: A capability investment opportunity in the option bundle that awaits recognition.</li> <li>ACO: A capability investment that has been examined and found to be both desirable and feasible.</li> <li>REO: A capability investment that has already been made.</li> </ul>	<ul> <li>(Bowman &amp; Hurry, 1993;</li> <li>Bowman &amp; Moskowitz, 2001; Timothy A Luehrman, 1998;</li> <li>Sandberg et al., 2014)</li> </ul>
Value co- creation		• Activities, collaboration, and arrangements through which the firm and BOP network co-create value.	• (Calton et al., 2013; Cazares et al., 2015; Hernandez et al., 2014)
Phases	<ul> <li>Committing to BOP strategizing</li> <li>Identifying available options</li> <li>Developing actionable options</li> <li>Crafting AgroEstacion</li> <li>Strategizing process options</li> <li>Engaging franchisees</li> <li>Networking for expansion</li> </ul>	• The process concerned with understanding how things evolve over time and why they evolve in the way they do; phases offer a means of conceptualizing events and detecting patterns among them. AgroEstacion was conceived, designed, and created through this process.	• (Langley, 1999; Van de Ven & Huber, 1990)
Source	• Speaker	<ul> <li>TMT: Top management team</li> <li>BOP farmer: Farmer with a small (1–5 ha) extension of land</li> <li>Local distributor: Local distributor from ANSA's network that can be classified as BOP</li> <li>Supplier: Top manager from an</li> </ul>	

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		<ul> <li>MNC</li> <li>Expert: From the agribusiness industry</li> <li>Franchisee: Local distributor selected to be part of AgroEstacion</li> <li>Task force team: ANSA's middle managers, who were invited to develop AgroEstacion</li> <li>AgroEstacion team: The task force team transformed into the AE (for AgroEstacion) managerial team</li> <li>Advisor: the research advisor</li> </ul>	
		- Auvisor, the research auvisor	

#### **VII CHAPTER 7: EMPERICAL ANALYSIS**

We published the preliminary results of the first stage of this action research as Cazares-Hernandez R., Lawson-Lartego, L., Quinonez-Romandia, S. and Mathiassen, L.: "Strategizing Value Co-Creation with Poor Farmers in a Mexican Agribusiness," The 5th International Conference on Engaged Management Scholarship, Baltimore, Maryland, September 2015. However, while my presentation of results from the first four phases here overlaps with this earlier account, it is distinctly different based on my own subsequent analysis (described in Section 6).

## VII.1 Committing to BOP Strategizing

**Exploring strategic and ethical business issues within ANSA.** On November 11, 2013, our team of students from GSU's Executive Doctorate in Business Program organized a first workshop with our advisor, Professor Lars Mathiassen, Ph.D., with the goal of developing a qualitative research project and writing an article on it. At the time, we were confused and undecided on important project details, including the context, the literature stream, and the methodology/approach to use. As we discussed the different challenges that firms face in diverse contexts, we found ourselves lost in a sea of theories and possibilities. Also, our research team had very diverse backgrounds and reference points: two of us were Mexicans; one was Togolese and had recently lived in the US, the UK, and France; and our advisor was a native of Denmark now living in the US. At some point, our team focused attention on one particular firm: ANSA, a Mexican agribusiness company in which I held a top management position. The team listened as I told the company's story—from its founding through the diverse phases of its life cycle—and also described its business model, the industry, the market, and, most important, the

challenges the company had faced over time and the very pressing ones it was currently confronting.

The day after this first workshop, the advisor sent us an email containing a list of issues to explore in studying ANSA, focusing on how the company had historically managed to grow and become sustainable by pragmatically maneuvering the complex landscape of forces in which it operates. Our research team thus aimed to document:

- critical events that had shaped the firm's trajectory;
- antecedents to these developments;
- details of the critical events and how the firm confronted them;
- the most relevant outcomes, including growth in business, improved sustainability performance, and improved reputation as a firm with a corporate sustainability profile; and
- the stream of literature we planned to contribute to with this work.

In early December 2013, our research team held a second workshop. This time, we felt more confident and less adrift, but we still had many unanswered questions. At the workshop, we discussed ANSA's history and current situation, searching for the opportunities to engage with the company. When our advisor mentioned "corporate sustainability," we began to find some clarity. It was also in this second workshop when DCT was first mentioned as a theoretical framing. It sounded elegant, scientific, and solid, which thrilled us. The idea of the research project was taking form. Our advisor then laid out the next phase: "We need to develop the following: a problem setting useful not only for the firm, but also for the business world, and an area of concern in the

literature, a research question of interest for practitioners and academia, and contributions valuable to the problem and an area of concern."

As a first step, we zoomed in on five key events in ANSA's history:

- Mexican banks stopped providing credit to farmers, so ANSA worked with suppliers to provide that service
- US markets requested "pure" berries—that is, nurtured without chemical pesticides—so ANSA provided requisite input
- The CCO wanted to diversify ANSA's suppliers to include advanced, smaller suppliers in addition to the few big players
- Security issues made ANSA retract from certain market areas, while providers pressured ANSA to continue in those areas
- Red-yellow tax brackets—that is, new taxes for agrichemicals calculated by the toxicity of the pesticide—forced ANSA to rethink its product portfolio

A third workshop took place at GSU at the end of January 2014. In this workshop, our research team explored the possibility of focusing its investigation on the BOP context because ANSA was embedded in the BOP market, and one of our researchers had extensive knowledge about the subject from working with CARE, an NGO. The research team wanted to explore the possibilities for ANSA to grow in the BOP context. Once again, we focused on DCT, and on a paper by Thasman and Marano (2009) in particular. All of our team members agreed that the firm had interesting opportunities for exploiting its dynamic capabilities in the BOP corn farmers segment in Mexico, especially given the considerable percentage of BOP farmers in some existing ANSA locations.

In the second week of January 2014, the research team decided to develop an action research with ANSA, using DCT to explore and engage with the BOP corn farmers market.

**Conducting a workshop with ANSA executives.** Later that spring, the research team organized a two-day workshop with ANSA's top management team (TMT) at GSU. The TMT consisted of four experienced people who knew the market, the industry, and the country; two of them began their careers working in MNCs and two had been working at ANSA for more than 20 years. The participants were:

- The firm's president is a 69-year-old self-made man. His first experiences in farming were in high school, when he spent his summers in California working in the fields with his uncle and cousins, picking vegetables and plowing the land for American farmers. He eventually graduated from a Mexican Agricultural College located in the state of Sonora, earning a degree in agronomy. Initially, he worked for an MNC; at 31, he became the youngest CCO in Mexico at that time. After being dismissed from the MNC, he moved with his young family to Guadalajara—Mexico's second largest city—and founded ANSA.
- The CEO is a 60-year-old agronomist from northern Mexico. He is well known in the industry as extremely loyal to the company and to the suppliers. He attended one of the top universities in Mexico and worked for one of the most important ANSA suppliers. He was the first to arrive every day at the office and for many years was the last one to leave at night. The customers, suppliers, and employees respected and loved him.

- The CCO is a 41-year-old agronomist and the second son of the company's founder. He was well known by the suppliers, had an excellent knowledge of the markets, and was strongly engaged in managing sales and discussing ANSA's strategies.
- The CBO is a 43-year-old business major with an MBA; he is the oldest son of the company's founder and author of this dissertation.

The research team had three objectives for the workshop. The first was to create trust and agree on collaboration between the research team and the TMT. The second was to develop an understanding of the firm's background: its history, business model, key financials, future plans, and challenges and opportunities. The third objective was to present a research proposal for consideration by the TMT, including the material on the BOP, DCT, and successful BOP business cases.

Creating initial trust took some effort. The guests appeared uncomfortable and had several questions related to a possible research collaboration. Early on, the CCO asked: "*I would like to know why we are here?*" To the non-Mexican members of the research team, that question sounded quite aggressive and created an anxious moment. However, the advisor took the lead, and started to present the researcher's background, as well as the practical validity of the proposed action research. Gradually, the TMT relaxed and started to joke around and engage with the subject of the meeting. Expressing a general TMT concern, the CCO said that "*the Mexican agribusiness context is quite different from the rest of the world, specifically the USA, and I am worried that we intend to implement strategies designed in the USA that will not work for sure in Mexico.*" The

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research team members then explained that the workshop had multiple objectives, and one very important one was to learn about ANSA's specific situation from the TMT.

**Discussing ANSA's history and its current situation, challenges, and sensing opportunities.** The workshop allowed the research team to learn about ANSA's history as well as its current challenges and opportunities. ANSA was founded in 1977; one of the main resources it developed over time was an extensive network of distributors more than 1,250 at the time this project began. Some of these local distributors had also developed over time, growing from small stores to strong local distributors with cultivated networks of physical, knowledge, and organizational resources. It was this growth among suppliers that had begun attracting the interest of MNCs. ANSA had survived many of its competitors due to its specific capabilities, the development of resources that strengthened its position in the industry, and (of course) a bit of luck. Still, the business context was rapidly changing, and it became clear that ANSA needed to adapt.

"We are lucky to work with something we love," declared the President, "we work daily from roosters to crickets" (that is, from dawn until dusk). But, as the CCO succinctly expressed it, "we cannot keep doing business as usual."

One threat that the TMT pointed out was that the MNCs, driven by pressures from their headquarters, began to look downstream to local distributors—ANSA's direct customers—to make them direct distributors for the MNCs. This scenario had played out once before in 2000, when a key supplier from one of ANSA's subsidiaries canceled its contract and opened new distributors in the central and southern states of Mexico, threatening ANSA's survival. Still, ANSA's relationship with MNCs is important. For example, in 2014, Dow Agrosciences—a subsidiary of Dow Chemical, and one of the main players in the agrichemical industry worldwide—had global sales of \$7.3 billion worldwide and \$96 million in Mexico; that same year, ANSA represented 25% of Dow's sales in Mexico, and Dow's products represented 32% of ANSA sales.

The TMT was worried about ANSA's position with suppliers. The President said: "We are worried that our big suppliers (MNCs) are thinking about how to obtain the knowledge and information we learned from the market; the only strategy we have right now is to diversify suppliers—something they don't like very much." Considering this challenge, the TMT emphasized that ANSA is a *people's* firm—that is, one of its key organizational resources derived from its dynamic capabilities and firm network is the way in which it has co-existed and moved forward with its people, supporting the professional development of its employees and retaining them for a long time. As the CCO expressed with pride, "We have three or four employees that are second or third generation, and some of them climbed in our hierarchy—for example, some sons of our old trucks drivers went to college, got their engineering degree, and now they are working at the firm as agronomists." One of ANSA's long-time priorities has been to maintain and develop its organizational resources-specifically, its human asset retention-by encouraging loyalty and supporting staff members in personal development, such as providing scholarships and company time for them to pursue academic degrees. This is noteworthy; ANSA is based in Mexico, a country in which the culture of retirement—that is, working for a single firm until retirement—is uncommon in the private sector. At ANSA, however, three employees have already retired after many years of working there and several other people have been at ANSA for more than 30 years.

Hence, one of ANSA's strengths is its knowledge resources, based on its operating in the industry for many years and representing a barrier for other players to enter the competition. Moreover, in 2009, as many companies in Mexico and internationally were going bankrupt, ANSA did well in large part because of its location in the agribusiness sector. As the President put it, "*People need to keep eating, it's that simple.*" Further, ANSA's presence in the market filled the void as other players left the sector. In particular, the CEO emphasized the absence of financial support from private banks for agribusiness: "*ANSA is providing financial support to the farmers and local distributors, taking the role of a bank, with some risks and rewards.*" The CCO also emphasized ANSA's activity managing MNCs' assets—transferring their inventory and their technology to farmers—which MNCs cannot do given the market's size and geographic dispersion: "*Our relationship with our suppliers is as important as the one we have with our clients.*"

**Discussing the BOP proposition and cases.** "More than half of the world is poor," said our advisor, "and we cannot expect the governments or the Bill Gates' of the world to solve this issue. It must be resolved through businesses—large, medium, and small ones—participating in the BOP segment, doing business, and making money in this process, contributing to poverty reduction. This is what we want to propose to ANSA, to expand its business by doing more with poor farmers." The research team thus presented to the TMT successful cases of companies engaging with the BOP so that the TMT could reflect on the possibility of orienting ANSA's strategy to include BOP engagement. From

Africa to Mexico, the cases were diverse and drawn from various industries and markets. *"I think we are already serving the BOP,"* said the CCO. Although our research team agreed with this statement, we argued that ANSA lacked a defined strategy for this market, despite having considerable data and knowledge that related to the BOP proposition in the firm's context. Engaging with the BOP in a strategic way represented a great opportunity for the firm, both in expanding to engage further with poor farmers and in actually producing more food. The TMT agreed that, while ANSA was participating in the BOP segment, its doing so was heavily dependent on a BOP network, with local distributors as middlemen. From there, ideas began to take shape, including the CEO's suggestion that ANSA could *"provide hybrid seeds on loan to farmers and recoup the debt after the harvest."* 

**Summary.** In this first phase, the TMT and the research team engaged in exploring possible BOP strategies; understanding the ANSA network's physical, knowledge, and organizational resources; and brainstorming available options. This phase also gave the research team requisite knowledge of ANSA and its context, industry, and market. This essential knowledge created the basis for developing a detailed research design and a collaboration agreement with ANSA. Table 12 summarizes these key findings.

Firm network	BOP network	Options	Value co-creation
<ul> <li>38 years' experience as a leading distributor of agrichemicals (knowledge)</li> <li>Logistics know-how anchored in a network of 2,650 customers, including 1,300 distributors (organizational &amp; physical)</li> <li>Logistics equipment and 22 warehouses (organizational &amp; physical)</li> <li>Experienced employees, including agronomists, managers, administrators, and operators with long-term ANSA relationships (organizational)</li> <li>Strong relations with the main suppliers (MNCs) (organizational)</li> <li>Previous experience as a financing substitute for distributors and farmers (physical)</li> <li>Flat operation (organizational)</li> </ul>	<ul> <li>Direct contact with BOP farmers (organizational)</li> <li>Knowledge of the market (knowledge)</li> </ul>	<ul> <li>Search for a strategy to reach farmers directly</li> <li>Explore the BOP market to understand its possibilities</li> <li>Become a financial supplier to the farming business</li> <li>Capitalize knowledge</li> <li>Distribute more directly to BOP farmers</li> <li>Exploit the logistics capability</li> <li>Focus on markets for corn, sorghum, and vegetables</li> </ul>	<ul> <li>Discuss ANSA's opportunities for value co- creation with BOP farmers</li> <li>Research cases of value co- creation in other industries</li> <li>Review ANSA's history as a basis for value co- creation</li> </ul>

# Table 12 Summary of Committing to BOP Strategizing

# VII.2 Identifying Available Options

The two-day workshop with the TMT helped our research team begin to generate preliminary ideas about the firm's available options. This propelled the launch of the second phase: sensing available options. The research team met every two weeks via Skype to discuss progress in researching and sensing available options. In early May 2014, the research team agreed on ANSA's biggest challenge: several ANSA suppliers—who were traditionally the firm's allies—intended to shorten the supply chain and go directly to local distributors, threatening the firm's continuity and market presence. "Ants are becoming elephants," said the CBO, "When one of our local distributors starts to compete against us and an MNC starts to work with him, we get angry, we get mad, but our reaction should be to concentrate on opening a new local distributor or strengthen a small one in the same region."

Another challenge was the credit line ANSA gave to its clients, one of the firm's physical resources. Due to specific financial internal policies, ANSA limited the amount of credit a distributor could access. Increasing the terms, time, or amount of credit required the distributor to present collateral. However, many distributors could not afford this additional collateral, so they faced a lack of inventory in the crucial phase of the cropping season. A third challenge was the limitations that BOP farmers faced in terms of credit, cash, and collateral, which capped their ability to improve their productivity. As the CCO expressed during the workshop: *"The BOP market is a difficult and risky one, surrounded with huge uncertainty."* In a way, as described above, ANSA was already participating in the BOP markets, but it was doing so without a planned or deliberate strategy.

During the research team meetings, we summarized our nine preliminary ideas into six available options:

• Option 1: Develop a joint venture (JV) with one of the MNCs suppliers who shared a strategic interest in shortening the supply chain between market

segments

- Option 2: Develop a catalog of specific products (a technological package) designed for the BOP farmers. Given the limited size of the land owned by BOP farmers, the specific technology packages designed for medium and large farmers are not accessible. Creating this new, smaller technological package would require an understanding of the BOP farmer's purchasing capacity
- Option 3: Identify strategies for engaging BOP farmers. This would require ANSA to search for the right strategies to increase demand for and awareness of products and services for this market segment. It would also require introspective exercises to understand which products and services—including financial services and mechanical equipment—ANSA could provide to increase the productivity of the BOP farmers
- Option 4: Develop tools for BOP self-organization, such as information centers, workshops, and knowledge-sharing meetings. Given the large number of BOP farmers in the country, ANSA could search for different forms of collectives, depending on local farmers' aspirations and needs
- Option 5: Help distributors target BOP farmers. ANSA's local distributors are mainly small and medium-sized businesses; some could be categorized as "mom and pop" stores. Of ANSA's 1,350 distributors, 75% lack strategic plans and management capabilities. The firm could exploit these established businesses providing them with training and IT support—through its well-established team of managers. Other training topics might include marketing and sales techniques, HR management, and accounting and finance

• Option 6: Develop a franchise model for the BOP farming market. This franchise model could be constructed in an alliance between the firm and selected distributors to create a branded distribution platform with the principal objective of serving the BOP farmers

**Summary**. This second phase allowed our research team to analyze initial data about ANSA and its suppliers, distributors, and markets. Our focus was on identifying available options for strategizing value co-creation with the BOP. As such, research team members discussed the firm's network resources, identified preliminary BOP network resources, and discussed preliminary ideas on value co-creation. Table 13 presents the findings from the second phase.

Firm network	BOP network	Options	Value co-creation
• Reaffirm initial knowledge about firm network from first phase	• Reaffirm initial knowledge about BOP network from first phase	<ul> <li>Develop a JV with one of the MNCs</li> <li>Develop a catalog of specific services and products for the BOP farmers</li> <li>Identify strategies for engaging BOP farmers</li> <li>Develop tools for BOP self- organization</li> <li>Help distributors target BOP farmers</li> <li>Develop a franchise model for the BOP market</li> </ul>	<ul> <li>Investigate options for cocreating value with MNCs</li> <li>Develop options for targeting BOP market and explore of possible solutions</li> <li>Increasing sales and access to technology for the BOP farmers</li> <li>Establish a firm presence in the minds of BOP farmers, offering information that can increase their negotiating power</li> <li>Create a strong tie between the firm and local distributors with benefits for both</li> </ul>

**Table 13 Summary of Identifying Available Options** 

### VII.3 Interacting with ANSA and the BOP Network

In the summer of 2014, the two of us who spoke Spanish began another phase of our team's data collection efforts in the western region of Mexico.

**Collect data and sense-analyze/dilute options.** In the second week of July, we visited Cihuatlan Jalisco, a small farming town of approximately 30,000 people occupying less than 443 square miles of land five miles from the Pacific Ocean. The main economic activity in Cihuatlan is agriculture-primarily cattle ranching and crop production (mainly vegetables, including corn, and fruit such as mango, banana, and papaya). Some farmers own big plots of land, but there are also small BOP farmers. We interviewed nine farmers with the objective of gathering data about the BOP farmers' reality and their conditions, using the six absence-dimensions of the asset hexagon as a guide. The data obtained from this first cycle of interviews showed that statements made at the TMT workshop in Atlanta were accurate: BOP farmers faced a lack of agriculture inputs, including credit and tools (such as machinery and irrigation materials). A papaya farmer who owned 3 hectares of land (7.4 acres), explained: "We have an absence of financial help in this business, especially to start the crop season, the beginning of the farming: soil preparation, manpower, and labor. The credit only comes from suppliers like ANSA, but manpower requires 60% of our cost of production," When we asked the BOP farmers to prioritize their issues from more important to less, the top priority was both unexpected and posed in the form of a question: "Who is going to buy my crop?" One of the farmers elaborated: "What we really need is the certainty that our crops are going to be bought and paid. After harvest, our crops end up in the hands of the 'covotes' [the Mexican nickname for middlemen who take advantage of farmers] and they always

take a long time to pay us." Said another farmer: "We have the will to pay our suppliers as soon as possible; we want to be on good terms with them ... Do you think there is a possibility that I could pay the supplier debt with part of my crop? That would help me a lot." As these comments and others showed, the main concern for the BOP farmers in this region was the absence of a secure commercialization channel for their products.

After two days, we traveled to a different region in western Mexico. On the first day, we visited "Los Altos de Jalisco" (Jalisco's Highlands) a region located 120 miles from Guadalajara City, to interview three local distributors. Los Altos consists of a group of 21 small and medium-sized urban areas within 9,300 square miles and divided in two regions: north and south. The area's main economic activity is agriculture, including cattle, pig, and poultry operations; dairy production; agave planting; tequila production; and corn farming. Our team's objective was to validate the commercializing channel issue expressed by the farmers from Cihuatlan, by interviewing two local distributors. This region is different from Cihuatlan in terms of weather, crops, and the farming cycle. However, the conclusions about BOP farming concerns were similar. As the distributor we interviewed in Tepatitlan town put it: "My clients have a lack of cash flow, selforganization, and information." Local distributors needed a reliable market for the harvest-which was also the main issue affecting BOP farmers. This point was underlined by a second distributor we interviewed in Zapotlanejo town: "My customers prefer to buy products (pesticides, fertilizers, and seeds) from the covotes who sell those products at very high prices, but accept harvest as payment."

Two important facts were confirmed in this round of interviews. First, farmers trust their local distributor; they ask distributors for advice and believe their recommendations. This confirms the power of influence that local distributors have over the decision-making process, which is a key organizational resource. Second, although funds are available, small BOP farmers do not benefit from government programs because they do not know how to access them.

We next traveled to Ayotitlan (see Illustration 1), a small town with a population of 620 in the south hills. Although this area is only 60 miles from Guadalajara, it still takes almost two hours to get to the local distributor store. In Ayotitlan, we interviewed a very energetic woman, who was the area's distributor, and her husband, who was a farmer. The woman and her three daughters managed the store without any technical or professional background. The region's farmers could, in every respect, be considered BOP farmers: they owned 3 hectares of property or less, had no mechanical equipment, and the amount of corn they produced forced them to rely on the coyotes.

The data we received this time was not surprising; the issues and terms were similar to those we heard about in the previous towns: "*The farmers in this area need urgent credit and training*," said the woman, adding that "*they trust us as distributors, and are open to our advice*." She also reaffirmed the local distributor's influence with BOP farmers as an organizational resource. She was an extremely committed leader in her community and showed honest concern for the wealth of the farmers: "*I'm trying to improve their well-being—teaching them to buy insurance every crop season and to sign a Contract Farming Agreement so we can help them to sell their harvest.*" A Contract Farming Agreement (CFA) is a contract the farmers sign in partnership with a middleman—in this case, a middle-woman—and a big buyer in the food industry that needs corn as a raw material (examples include vegetable oil companies, food processors,

meat processors, flour processors, and big farming companies that sell poultry or eggs). Our interview with this distributor again confirmed a lack of equipment and technology among the BOP farmers, adding to a lack of credit and training.

**Conduct workshops with Task force and customers.** Early in August, my Spanish-speaking colleague and I reunited with ANSA's department managers at the firm's headquarters. We invited managers whose main activities were related to or had contact with customers, farmers, and distributors. The participants were:

- the acquisitions manager
- Guadalajara's business unit manager
- the inventory manager
- the operations manager
- the credit analysis manager
- the internal auditor
- the comptroller
- the central warehouse manager, and
- the bill collection manager

We first explained to the managers the discussion's objectives by presenting the research and its goals. It was important that we listen to this group of professionals, because they had worked for many years in the firm and interacted daily with the farmers and local distributors. We let the managers speak freely and mediated the discussion based on the points already discussed with the distributors and the BOP farmers. We learned that credit problems were not just related to absence of cash, but also to ignorance

of how to apply for financial support. The Acquisitions Department manager shared her experience in dealing with the BOP segment: "Some years ago, we discovered that, at that time, all the distribution companies in the central states of Mexico were fighting to get one client that used to be the biggest in that area. And, after a research was made by a sales rep, we discovered that there were a lot of small businesses and small farmers unattended by the market, because everyone wanted to have the big customer." That sales rep, she said, had gone from ranch to ranch, visiting with those small farmers.



**Illustration 1 Ayotitlan Jalisco** 

An important outcome of the data we gathered in that meeting was the realization that most local distributors were weak in their knowledge of administration, credit policies, inventory management, and accounting strategies. These disadvantages pushed many local distributors into administrative chaos. The comptroller and the credit analyst shared the experience of helping some of ANSA's local distributors when they faced fiscal problems or billing collection issues. "In the Billing Collection Department, we advise the client how they can pay their bills, giving them the best options to pay their debts. We also advise the clients to not buy too much inventory—something the people in the Sales Department don't like very much."

In early August 2014, we held a meeting with one of the top executives of a European MNC that was one of ANSA's suppliers. "It's a relief for me that we're having this conversation, because in our company, we are very concerned about ANSA's future. We are convinced that ANSA has important strengths, but there are some challenges to which we don't see any action taken by ANSA," said the executive. "One of the strengths ANSA has is its people, the sale force, and the technical support this team provides to the market, especially to the distribution channel. But this distribution channel is also a disadvantage, because the farmer sees more of the local distributor than ANSA." The executive called this an *eclipse effect*. He pointed out that ANSA is a distributor that develops and promotes products, and that other types of distributors exist that do not contribute to the market, but rather offer only logistical functions. When asked about his company's position on creating a JV with ANSA, he said that his company "does not have this kind of strategy in the short, medium, or long term, because in Mexico we don't have knowledge about any successful case of a JV between a supplier and a distributor. *As we know, this strategy showed poor improvements and more problems for both parties* in the past." This statement began to change our actionable option list. Further, in addition to what the previous interviews provided, the executive mentioned the three main challenges for the BOP farmers, but in inverse order; this showed us that the MNCs did not have accurate data regarding the BOP market segment. As the first problem, the executive cited training in technology use; second, access to credit for seeds and products; and third, the commercialization of their crops. The executive finished with a key statement: "ANSA needs to make a strategic decision about what it is going to do in the future, which road it is going to take. Is it going to be a supplier of crop protection products or is it going to go downstream to develop products and participate in the market directly with the farmers?"

That same day, our team met with a second top executive from an MNC based in the US that was also an ANSA supplier. This executive held an important position, and had access to data from the industry and the market; also, he had known ANSA for more than 30 years. The meeting took place at the executive's office. "ANSA is very important," he said. "In general, the distributor covers a priority—that is, the risk of operating retail sales. The second important part that justifies the distributor's existence is the creation of demand—that's the job of the distributor. When the distributor does not create this demand, that's when we the suppliers opt for going directly to the market." The executive had similar opinions as his counterpart. This company's strategy for growing in the market was less aggressive and sustained not in terms of loyalty but due to its hard credit policy for new customers. This executive believed that changes were needed in the distributor structure, and that the BOP strategy sounded like the right one to follow: "We, as suppliers, cannot reach the BOP farmers. There are so many, they are so widespread." The JV strategy option lost weight in this interview as well. The executive told our research team that his company's stand on this strategy was not positive as it had done JVs with distributors in the past, and in Mexico and Central and South America those ventures had ended in failure. The research team asked him his opinion about ANSA collecting grain from the farmers as payment, and he agreed strongly on this point: "We had suggested to ANSA in the past to receive grain. When you become the recipient of the grain, the farmer will trust you and be more open to the advice you give to him."

Interact and discuss with executive team. After the interviews with the suppliers, our research team sat down with the TMT to discuss the preliminary findings. While preserving the anonymity of the interviewees, we provided an overview of the key findings. The firm's President and the CEO were surprised about these preliminary findings, including the comments, opinions, and the near- and long-term plans for moving ANSA forward in the industry. Initially, the TMT members were in denial about this information, but at the end of the meeting, the TMT agreed to be more open to the idea that a new strategy was needed.

**Summary.** In this phase, the JV actionable option was discarded after we learned of the suppliers' position and their past experiences with this type of venture. However, almost all interviewees agreed on one thing: ANSA needed to become involved in the commercialization of the harvest in some way. Everything suggested that ANSA should focus its effort downstream, on the BOP network and the resources owned by its members. In this phase, our research team identified the BOP network's resources and seized on a downstream strategy as the firm's best option. We identified the local distributor's potential to develop access to the BOP market in this phase, allowing the firm to develop a strategy supporting these resources. Finally, the franchise model was decided on as the most appropriate option. Table 14 summarizes these results.

Firm network	BOP network	Options	Value co-creation
<ul> <li>Capacity to supply credit to small farmers (physical)</li> <li>Training capacity to develop local distributors (organizational &amp; knowledge)</li> <li>Personnel with technical knowledge to support local distributors and farmers (organizational)</li> <li>Creator of demand for the MNC (knowledge &amp; organizational)</li> <li>Good image upstream and downstream</li> </ul>	<ul> <li>Power of influence with the farmers</li> <li>Middleman function (organizational)</li> <li>Knowledge about the market (knowledge)</li> <li>Top-of-mind leadership with the BOP farmer (organizational)</li> <li>Family-business (organizational)</li> </ul>	<ul> <li>Develop a downstream strategy through local distributors to exploit their power of influence</li> <li>Identify strategies for engaging with BOP farmers and local distributors</li> <li>Develop a strategy for helping distributors targeting BOP farmers</li> <li>Develop a farmers</li> <li>Develop a farmers</li> </ul>	<ul> <li>Understand options for co-creating value with local distributors</li> <li>Develop the quality of local distributors' operations</li> <li>Increase BOP farmer productivity by collecting their crops, thus strengthening the relation between ANSA, local distributors, and BOP farmers</li> <li>Create strong ties between ANSA and distributors through crossing-knowledge</li> </ul>

### Table 14 Summary of Interacting with Firm and BOP Network

## VII.4 Developing Actionable Options

**Conduct workshops with research team, executive team and task force.** At the end of August 2014, we held a second workshop with the TMT at ANSA's headquarters. Our research team members from Atlanta participated face-to-face with managers and the TMT at ANSA. The objectives for this second workshop were to dilute the options and seize on five that were actionable, then decide which would be part of the implemented business model. We first offered a summary of the outcomes from the interviews and the focus group, and then we presented the Integrated Model of BOP strategizing (described in Section 4.3) on a whiteboard to explain how ANSA would collaborate with the BOP network for value co-creation (Figure 7).
The TMT and our researcher team concluded that ANSA's efforts should focus on an adapted franchise model that would combine the actionable options. This option would support ANSA's needed expansion and help address its weakness by developing a close collaboration directly with BOP farmers. It would positively improve supplier perception of ANSA through a strategy that would both move the firm closer to the final users of products and fill the void of knowledge in the BOP network about the corn commercialization business. Overall, it would also strengthen ANSA in its position versus competitors.

On the second day of the workshop, we recommended creating a task force of managers from ANSA's administrative and commercial departments. Their participation and professional expertise and background could add value to the project under the CBO's leadership. The task force had four objectives:

- Understand the franchise business model's regulations and legal concepts in Mexico.
- Design the franchise's service and product portfolio and the administrative and commercial processes as the main components of the business model.
- Design the organization structure for this entity.
- Create the brand, symbols, mission, vision, and motto.

**Develop/seize actionable options.** In early September 2014, the selected departmental managers were invited to meet with two members of our research team at ANSA's headquarters. There, we presented the project's antecedents, the main findings of the data collection, and the preliminary conclusions of the strategizing process. We

also informed the managers about the creation of the task force. The managers were enthusiastic about the project, and confirmed their full commitment to working with the research team in the objectives cited above. We informed the task force that the timeframe was short, but they were optimistic; as the credit manager declared: *"Time is short, but we can do it."* Later that day, a law firm was invited to work on the legal matters to involved in creating the new franchise company, as well as to provide advice on how ANSA could engage with the local distributors. The legal team also advised ANSA on how it might later detach the franchisee from the company. The law firm was in charge of designing the new entity's legal structure and the contracts required to regulate its operation. It also offered advice about the taxation situation between the franchise and franchisees.

In late September, I used participant observation to begin documenting and recording the task force's efforts to implement the new strategy based on the Integrated Model of BOP strategizing (Figure 7). The task force presented a list of possible brand names for the new company, aiming to choose one that would describe the full spectrum of products and services. From an extensive list, the group selected *AgroEstacion* as it reflected a set of key meanings; in Spanish, "Estación" means both "station" and "season":

- AgroEstacion: As a season for agricultural activities
- AgroEstacion: As a station—that is, a point or site of frequent stopping in a transportation chain (as in a train station)

• AgroEstacion: As a station in the sense of a building or site at which specific services are offered—in this case, a one-stop location where farmers can find all the agro supplies they need

The essential function of AgroEstacion was to allow ANSA to engage the BOP network, to provide better services and products to BOP farmers, and to help BOP farmers develop into better crop producers. As we argued in our previous paper: "*This process would assure the principle of social and economic promotion of the agents of the BOP network based on the dynamic capabilities of both firm network and BOP network*" (Cazares-Hernandez, *et. al*, p. 18).

Due to Mexico's 2014 taxation law imposed on the agribusiness industry's use of pesticide products, the task force had to implement a business model that would avoid double taxation by inserting a new stakeholder between ANSA and the local distributor. Hence, the task force decided to create AgroEstacion as a business platform, with three key operational activities:

- Coordinate acquisition of products and service for each franchisee from ANSA and other suppliers.
- Offer support services, including IT, logistics, marketing, human resources, government lobbying, legal procedures, store management, credit coordination and billing supervision, and accounting control.
- Offer development services, including market linkages, financing, knowledge management, and the development of new lines of business.

Through these operational activities, AgroEstacion would participate in the growth of franchisees and control of their assets, and help franchisees gain access to financial services. Such support would thus help the franchisees increase their working capital and knowledge and gain faster access to new technologies. Figure 10 explains AgroEstacion's business model.



Figure 10 AgroEstacion business model

In the first week of December 2014, our researchers and the task force conducted a second interview with one of the local distributors we'd visited previously during data collection. The purpose was to do a follow-up and to get her input on and level of interest in the AgroEstacion business model. The CBO conducted the presentation, explaining the

preliminary ideas and showing her the logos and the artist's conception of what a franchise store might look like. At the end of the presentation, the distributor's response was quick and strong: "Where we do sign?" The task force said there was plenty of work to be done, but, at this point, it was most interested in her feedback on what might improve the project. She pointed out that a key idea here was for franchisees to feel that they have backup through a partnership with a company as big as ANSA: "As a business person and entrepreneur, what holds you down is ignorance—not knowing how to put things in motion... the support of a company such as ANSA will help us to move forward and faster." The CBO explained that this kind of partnership could tie her up and limit her decisions as well; she would not have the same freedom due to the necessity of following certain procedures. She agreed, but said it would be acceptable because: "We trust that you know what is best for us." ANSA's CEO, who also participated in the meeting, explained that the benefits from this type of partnership went both ways, because ANSA had knowledge on how to operate a business, and the local distributors had knowledge about the market.

**Conduct workshops with ANSA executives.** Our research team also held a third two-day workshop with the AgroEstacion task force and the TMT at ANSA's headquarters in early December. In this workshop, we discussed recent outcomes and refined the plan for the new entity, reaching four key conclusions guided by a statement from the firm's President: *"We should be careful to not offer something we don't know about; we should focus on what we are experts in."* 

Those four conclusions were as follows:

- We would simplify the model and reduce the services the franchisees would offer to the BOP farmers, focusing on a simple portfolio: credit, agrichemicals, fertilizers, seeds, technical support, and brokerage of their harvest
- ANSA would invite as franchisees only those local distributors who could be considered BOP and had experience in financing BOP farmers and brokering their harvest
- The legal agreement for this engagement would be a Partnership Business Agreement (PBA)
- We chose the final logo for AgroEstacion (see Illustration 2)

Our research team and the task force also had a meeting that same day with an industry expert who owned a firm similar to ANSA, but located in a north state of Mexico. The meeting had two objectives: to record his comments, opinions, and suggestions regarding AgroEstacion; and to explore the possibility of him enrolling in AgroEstacion through a JV. The second objective followed our strategizing model (Figure 7) based on the knowledge that his firm owned specific resources and also owned a BOP network located in regions where ANSA had no coverage. This kind of alliance could accelerate AgroEstacion's development in different areas with BOP farmers—specifically, in states in the Gulf of Mexico area. Further, his feedback was valuable because he had spent his entire life in the industry and knew the main stakeholders and the structure of the market. The industry expert found our project attractive and said it had high potential for success; however, he rejected the invitation to explore a JV saying that, for the moment, his firm had other projects in development.

Select/reconfigure major option (micro-franchising). In mid December 2014, the task force and the TMT met to follow-up on the plan and answer the doubts that some managers had about the project. After presenting the outcomes from the previous meetings and workshops, the CEO said: "*Now we know where we are going*." The CBO was also confirmed as the leader of this project.



**Illustration 2 AgroEstacion commercial logo** 

A week later, the task force organized a day-long meeting with the law firm that was supervising the project's legal aspects to draft the legal contract (the PBA) in a way that was clear and attractive for the partners. Next, the task force designed the organizational structure, aiming to make it as flat as possible. The task force decided that a General Manager and four department managers would lead AgroEstacion. Figure 11 illustrates the initial structure for AgroEstacion for the periods of 2014 and 2015.



### Figure 11 AgroEstacion organization chart

The main responsibilities for each manager were as follows:

- *General manager*: managing overall outcomes of the operation and the franchisees; dealing with the corn buyers (vegetable oil producers, food producers, etc.); negotiating with suppliers, financial providers, and governmental funds; growing the number of franchisees; and supervising the overall operation.
- *Accountant*: handling the platform's fiscal and internal accounting; training the franchisees to process the accounting information, which must be uploaded every month to the fiscal authorities; and preparing the tax declaration of the franchisees.
- *Administrative manager*: managing the program and planning the acquisition of products and services for the franchisees and the platform; and collecting and organizing the documents that the franchisees collect from their farmers to prepare and send the contracts to the authorities for the CFA.
- *Marketing*: supervising the franchisees to ensure that they follow the administrative and operational processes; supervising the commercial and

marketing processes; and monitoring each store's operations to ensure they follow the procedures described in the manuals.

• *Technical advisor*: an agronomist engineer responsible for overseeing the technical package for the crops offered by the franchisees; supervising the crops in partnership with each store's owner; visiting the farmers; and planning and giving training seminars to the farmers.

The task force began with the development of the operation manual for each department. Due to the amount of work, two additional members—the budget planner and the IT manager—were invited to join the team to design the financial and IT plans. In the first week of January 2015, the law firm presented the PBA to the CBO and the task force for review. Two days later, the PBA was accepted. The task force also decided to invite two local distributors to a preview presentation of the company to gather feedback. The task force presented the final logo and the final blue prints for the stores. One of the franchisee candidates—the energetic woman from the town of Ayotitlan—said: "*Tm tired of asking: Where do I sign?*"

AgroEstacion was established as a new subsidiary of ANSA to work directly with select franchisees. Two franchisees were selected initially based on the following:

- They could be considered BOP businesses due to a lack of key assets specified in the assets hexagon and their inability to grow by themselves in the short term.
- They had deep knowledge in their areas of market, geography, crops, farmers, and micro-logistics.
- They were influential with the BOP farmers in their area.

• They saw ANSA as an ally.

Both franchisees were women who had been in the market for almost 10 years. One was established in the state of Michoacan in a town called *Idaparapeo*, located 30 minutes from Morelia city and three hours from Guadalajara. The other was the woman in Ayotitlan town, located two hours from Guadalajara.

**Summary.** This phase represented the beginning of seizing and developing the selected franchise business option to make it actionable. The brand name and the logo were selected and the task force was created. This phase also created the foundation for subsequent implementation of the new firm, AgroEstacion. Table 12 summarizes the key results.

Firm network	BOP network	Options	Value co-creation
• Reaffirm initial knowledge about the firm's network from the first, second, and third phases	• Reaffirm initial knowledge about the BOP network from the first, second, and third phases	<ul> <li>Create the Integrated Model of BOP Strategizing</li> <li>Select the franchise model option</li> <li>Create the task force</li> <li>Design AgroEstacion: the brand, logo, business model, legal structure, PBA, and organizational structure</li> <li>Choose the portfolio of products and services: credit, agrichemicals, seeds, tech support, and crop brokerage</li> <li>Design the franchisee profile</li> <li>Choose two local distributors as franchisees</li> <li>Explore JV with industry expert</li> </ul>	<ul> <li>Strengthen the local distributor by developing new resources, which will in turn provide better services and products to the BOP farmer</li> <li>Crossing- knowledge</li> <li>Encourage co- growth through co-work</li> </ul>

**Table 15 Summary of Developing Actionable Options** 

### VII.5 Crafting AgroEstacion

**Transform task force into AgroEstacion team.** At the end of spring 2015, regular activities in ANSA's operation reduced the task force to six people:

- The CBO of ANSA
- The credit manager of ANSA, who was also the operational leader of the AgroEstacion project
- The financial planner of ANSA
- A credit analyst
- The operation manager of ANSA
- An intern (a college student majoring in agribusiness)

ANSA's managers supported the project with specific activities, but no longer played an active-operative role. The new task force invested most of its time in reconfiguring ANSA's relationship with the franchisee candidates and in crafting AgroEstacion.

By spring 2015, pressure was hitting ANSA's managers and the task force due to both demands from local distributors and the standard dynamic at the start of the corn season. The AgroEstacion project was not mature enough to be fully in motion, but the two selected local distributors were eager to see evidence that ANSA would fully commit to the project. The local distributors required capital to buy fertilizers, seed, and agrichemicals, and they wanted to know if AgroEstacion would be available to help them. Aiming to cover these necessities, the task force implemented a preliminary program, targeted at creating certainty with the two distributors. The CBO sent the following memo to the TMT, and the task force took steps accordingly: *Related to the pressure from our two clients that were selected to be AgroEstacion members, we came up with the following package to help them go through the rainy season and create certainty about the continuity of the project:* 

- We will provide two computers with software to each of them connect them to our server and train them in the use of the business software
- We'll start a training program in the administration of their stores, as if AgroEstacion was already functioning. They'll receive training in the software, the creation of credit files, and the administration of inventory
- We'll follow the operation of their business via IT
- The AgroEstacion project leader will work close to them to learn the process of the funds delivery to the farmers, and the process of commercialization of the corn, and the purchase of fertilizer
- They will receive an extension and increase in their line of credit from ANSA

With these five actions, the task force gave certainty to the franchisees through evidence that ANSA was fully committed to developing AgroEstacion.

By the end of spring, the credit manager and operational leader of the AgroEstacion project sat down with the CBO and decided to make changes in ANSA's administrative structure to enable the project to move forward. The CBO organized a meeting with the CEO and the CCO to inform them about his decision to appoint the current credit manager as the general manager for AgroEstacion, noting that: *"He is young and ambitious, and this position needs someone willing to travel a lot and with* 

*social skills to deal with farmers and the franchisees.*" The CEO and the CCO agreed with the decision. The CBO and the new manager for AgroEstacion then designed a plan to change ANSA administrative process and reconfigure the organizational chart. The reconfiguration of ANSA's business process began in May 2015 with the merger of two departments:

- Credit Department (5 employees)
- Billing Department (7 employees)

AgroEstacion's new general manager took with him three credit department employees to work full time in AgroEstacion. It took almost one month to do the merger, and by the first day of June 2015 AgroEstacion's personnel were free to work full time on crafting the new company.

Design AgroEstacion business franchise concept and select distributors for partnership. At the end of the research's first stage, three distributors were selected to become AgroEstacion franchisees. However, by the time the AgroEstacion team was formally established, the decision was made to concentrate the project on just two distributors. The third, a candidate from Los Altos, did not own the BOP network required at that time and did not participate in or have knowledge of resources related to grain commercialization, which was an important resource to ensure the franchise's optimal operation.

In a summer 2015 meeting between AgroEstacion team and the law firm, a decision was made to keep the legal issues simple and easy to understand in order to motivate local distributors to engage in the process. One of the lawyers explained: "*The* 

model we need to follow is to be a business platform for agribusiness and commercialization. It's a Partnership Business Agreement, it is not a regular partnership or an incorporated company. We have been reviewing options so we do not get all tied up with partners that probably in the future will want to leave, and we found that a Partnership Business Agreement is the most adequate for this project." A PBA was thus chosen as the legal instrument to specify the relationship between AgroEstacion and its franchisees. A PBA has the following characteristics:

- Each signer company (AgroEstacion and the franchisee) maintains its own legal identity with federal, state, and local authorities. They also have the freedom to end the agreement after a previously established period of time (one year)
- AgroEstacion will supply, through this agreement, the outsourcing service of administration (IT, purchasing services, asset administration, and HR administration) and accounting to the franchisee
- AgroEstacion will supply the complete transformation—aesthetic and operational—of the local distributor store without cost to the franchisee
- The agreement will be signed for five years, with renewal possible for five years more

Because AgroEstacion was not yet legally constituted, ANSA began covering specific needs to keep the project moving. AgroEstacion's general manager suggested the following: *"Besides having the Partnership Business Agreement, we need to keep working, so ANSA will supply the equipment to the franchisees."* 

The two local distributors were located in separate states. Both were entrepreneurial women whose business had a family structure. One was located in the town of Avotitlan, Jalisco (Illustration 1), while the second was located in Indaparapeo, Michoacán. The towns were 245 miles apart, and it took more than five hours to travel between them. This left room to grow the number of AgroEstacion stores in the future without having them compete against each other (Illustration 3). The first franchisee, in Ayotitlan, owned in her BOP network an organizational resource of 350 BOP corn farmers. She was well known in her area of influence; farmers trusted her, asked for advice, and took her recommendations. She knew the BOP farmers personally and could assess their reliability regarding who could receive credit and who would pay regardless of the harvest outcomes. She had a small store located at the base of her house near the center of the village, with a medium-sized warehouse to receive the corn after harvest. Her store had a computer, albeit with a very slow Internet connection. She was a very dreamy woman, frustrated by not knowing how to achieve their plans "As an entrepreneur you are sometimes ignorant, not knowing how to put in motion your projects," she said.

The second selected franchisee owned a small store with the same limitations and inadequate capacity. She has an accounting degree and two employees helping her with the administrative aspects. This franchisee owned a smaller BOP network, but had a bigger land extension. She worked with only 25 farmers, and these farmers produced white corn. She had nearly 10 years of experience as a middle-woman between farmers and corn buyers (millers).

A year before our research began, this distributor had planned to retired from the industry: "After facing all the problems trying to organize the farmers from my former job, I took the decision of retire, but the farmers I knew asked me not to do that, because they didn't have anyone else to help them with the commercialization process." When the AgroEstacion project was presented to her in December 2014, she said: "This is like the dream I had when I started to do this, opening my small company—to have everything in order, well organized. I would not mind working following a process like in AgroEstacion, because with this I could invest my time doing what I love: selling and growing the market."

The fees that support the AgroEstacion platform with income are structured as follows:

- Franchisees will pay a fee of 7% of their annual sales to AgroEstacion
- For the credit supplied by AgroEstacion, franchisees receive a preferential rate of TIIE (The interbank equilibrium interest rate in Mexico's financial system) plus 8 points (in 2015, the TIIE was 3.11)
- For franchisees who do not engage in contract farming with their farmers, AgroEstacion platform will charge the franchisee an additional 25.00 pesos (USD \$1.51 in 2015) per ton
- Franchisees will receive a special credit term of 90 days per invoice from ANSA (regular local distributors get only 45 days)



**Illustration 3 Distance between franchises** 

**Design AgroEstacion plan, including processes, models, and manuals.** Figure 11 shows the AgroEstacion business model. By August 2015, things were full in motion and both stores were under renovation. The business plan was designed during meetings between the CBO, the general manager of AgroEstacion, and the accounting manager. Table 16 shows how the business model reconfigures the business process, integrating both networks in an inform/develop process co-creating value for both networks and the BOP farmer. Also, the designers decided that AgroEstacion would work as a business platform, with a flat but knowledgeable organizational structure, to maintain low operation costs.

Strategizing					
Firm Netw	vork	BOP Network		Value Co-creation	
Informs	Develops	Informs	Develops	Enables	Triggers
<ul> <li>Stronger distribution network</li> <li>Farmers and market data</li> <li>Knowledge</li> </ul>	• 3% annual fee	<ul> <li>IT services</li> <li>Logistics</li> <li>Marketing</li> <li>Human resources</li> <li>The permits process</li> <li>Maintenance</li> <li>90-day credit term</li> </ul>	<ul> <li>Farmers data access</li> <li>Market data (crops, weather, local techniques)</li> <li>Brand name</li> <li>7% annual fee</li> <li>TIIE + 8 points rate for credit</li> </ul>	<ul> <li>Credit</li> <li>Products</li> <li>Seeds</li> <li>Advice</li> <li>Tooling services</li> <li>Brokerage</li> </ul>	• Wider and stronger presence in the market

### Table 16 AgroEstacion strategizin value co-creation

To exploit ANSA's existing knowledge and organizational resources, it was decided that the firm's operative manuals would be used for AgroEstacion. Credit and inventory management manuals were also copied for AgroEstacion. Table 17 shows the process manuals from ANSA and those developed specifically for AgroEstacion. The two main processes that gave more value for AgroEstacion in the eyes of the BOP farmer were the CFA process and the brokerage process. These two services were tightly related, as the first (CFA) is needed to facilitate the second (brokerage). As I explained earlier, the government designed the CFA process and wants all corn farmers to regularly use it.

At this time, AgroEstacion's appointed general manager was already aware of the practical and specific details of the CFA process. As he noted, you must first contact ASERCA, the federal government office that promotes agriculture. It then sends you a package that includes a list of farmers registered in the PROCAMPO census. *"This type*"

of agreement is basically a partnership or association by contract in which you, the administrator, search for a buyer for the crop, " said the general manager. Both of the selected franchisees already had previous experiences managing CFA; they both found it to be a time-consuming activity. AgroEstacion could help the franchisees here, using technology and knowledge to speed up the process and grow the buyers' spectrum by exploiting ANSA organizational resources.

Process	Designer and owner	
Purchasing process manual	ANSA	
• IT counter process manual	ANSA	
<ul> <li>Logistics process manual</li> </ul>	ANSA	
• Marketing (auditory)	ANSA	
• Legal	ANSA	
Technological advice process	ANSA	
Training process	ANSA	
• Brokerage	AgroEstacion	
• Farming agreement contract process	AgroEstacion	
• Farmers data base construction	AgroEstacion	
Tooling services	AgroEstacion	

**Table 17 Owners of process manuals** 

**Beginning of initial training process for franchisees (downstream).** The initial training of the franchisees began in March 2015 and concluded in April 2015. This training was conducted by three different suppliers: personnel from ANSA, personnel from AgroEstacion, and personnel from RAVE, a human resources' outsourcing

company and ANSA subsidiary—thereby exploiting the firm's network resources as described in our model (Figure 7). Table 17 shows the courses and owners.

At the end of March 2015, IT equipment was installed at the Indaparapeo AgroEstacion and a collaborator from ANSA's IT department trained the personnel and franchise owner in how to use it. Another ANSA collaborator completed an eight-hour training course and then traveled to Indaparapeo to begin 42 hours of training for the franchisee and her staff in use of the administrative software. Next, ANSA's subsidiary RAVE provided a six-hour training course in credit titles.

The first two trainings (IT and administrative software) with the same trainers began in first week of April 2015 at the Ayotitlan franchise store. The training course provided by RAVE was put on hold; the AgroEstacion team taught this course in January 2016.

In August 2015, a member of AgroEstacion's team taught a 21-hour review training course at the Michoacan franchisee. The same review training was offered at the Ayotitlan franchisee in February 2016. Tables 18 and 19 show a detailed description of the training plan for each franchisee.

Both training experiences were different. According to AgroEstacion's general manager, the first experience doing the training courses revealed some resistance from personnel at both local distributors, who said that these administrative processes would take too much time from them. However, according to comments made in a follow-up visit in December 2015, personnel from the Michoacan franchise have now changed their mind; as one staff member said: *"Life is easier— we have everything in order, and the information is available and easy to find."* 

Initial training plan 2015			
Training course	Instructor	Duration (hours)	Date
IT installation and use	ANSA IT	8	March 23, 2015
SAI-Inventory	ANSA	16	March 24-25, 2015
Credit process	ANSA	8	March 26, 2015
Invoicing process	ANSA	8	March 26, 2015
Customer base and payment application	ANSA	8	March 27, 2015
Effective collection process	ANSA	2	March 28, 2015
Credit titles training course	RAVE	6	Pending
Review training course	AgroEstacion	21	August 9, 2015

# Table 18 Training plan 2015 Indaparapeo franchisee

## Table 19 Training plan 2015 Ayotitlan franchisee

Initial training plan 2015				
Training course	Instructor	Duration (hours)	Date	
IT installation and use	ANSA IT	8	March 30, 2015	
SAI-Inventory	ANSA	16	March 31–April 1, 2015	
Credit process	ANSA	8	April 6, 2015	
Invoicing process	ANSA	4	April 7, 2015	
Customer base and payment application	ANSA	4	April 7, 2015	
Effective collection process	ANSA	2	April 7, 2015	
Credit titles training course	RAVE	6	Pending	
Review training course	AgroEstacion	21	Pending	

Sign bailment contract (equipment) and handle legal issues (registration, contracts, and trademarks). At the beginning of summer, the AgroEstacion team approved the preliminary bailment contracts (for equipment) to be signed by the franchisees. As mentioned previously, ANSA was one of the signing parties, as, at that time, AgroEstacion did not have legal status. A week later, the bailment contracts were signed. In a sign of trust between the local distributors and ANSA, equipment—computers and, in the Indaparapeo case, a truck—had already been delivered early in March 2015.

On November 30, 2015, the law firm informed ANSA via email that the AgroEstacion trademark titles it had applied for in May 2015 had been accepted by the authorities and were ready to use.

**Build the model store in Tlajomulco town.** The AgroEstacion team and ANSA's TMT decided to postpone construction of this store, aiming instead to direct financial resources toward more urgent matters. Among these matters was the need to acquire products—such as fertilizer and some seeds—that were not regularly in ANSA's pipeline and that, given their nature, had to be paid for in cash. The model store's construction was thus postponed to September 2016.

**Summary.** In this stage, ANSA—through the actions of its TMT and managers reconfigured the structure and processes to be adapted to the realized option. This stage was primarily constituted by action and change. Most of the decisions were put in motion, and the firm adapted its structure to harmonize with the new strategy. Table 20 summarizes the results.

Firm network	BOP network	Options	Value co-creation
<ul> <li>Proactive management team (organizational)</li> <li>Adaptive business model (organizational)</li> <li>Supply capability (organizational)</li> <li>Outsourcing services and management (organizational)</li> <li>Exportable operational manuals (organizational)</li> </ul>	<ul> <li>Reaffirm initial knowledge about the BOP network from the first four phases</li> <li>Farming agreement contracts experience (knowledge)</li> </ul>	<ul> <li>Partnership Business Agreement</li> <li>AgroEstacion as an administration platform</li> <li>Two local distributors selected as franchisees</li> <li>AgroEstacion income plan</li> <li>Business model</li> <li>Task force reconfigured</li> </ul>	<ul> <li>Freedom to leave or maintain the partnership</li> <li>Fast, low-cost business process</li> <li>Financial benefits in cost and in terms</li> <li>Wider possibilities of serving more farmers with the farming agreement contract</li> </ul>

**Table 20 Summary of Crafting AgroEstacion** 

### VII.6 Strategizing Process Options

Design the commercial and cross-learning processes (for the firm and franchisees). One of the enabling processes that the strategy will create is the cross-learning process between the firm and its franchisees and between the franchisees.

Selection of the first franchisees was based on an analysis of their network and ownership of diverse knowledge in the brokerage process (knowledge resource), which served two different types of BOP corn farmer (organizational knowledge). Table 21 shows the difference in the markets of the first two franchisees.

The AgroEstacion team selected the franchisees primarily because of their network resources, but also because their locations did not create a conflict between them, allowing them to grow into more stores if there was potential to do so. This distance also gave them the security to share their knowledge—not only with AgroEstacion as a platform, but also with each other as allies. The AgroEstacion team designed three cross-learning forums to be held at three key times: one in March, before the beginning of the crop season; one in June, which was the middle of the Spring-Summer crop season; and one in December, during the harvest season. The first cross-learning forum took place on December 11, 2015, and was called the *Growth Forum*. Illustration 4 displays the *e*-invitation to the first forum.

Differences in market structure between franchisees			
Ayotitlan, Jalisco	Indaparapeo, Michoacan		
<ul> <li>350 farmers attended</li> <li>Average land owned: 3 to 5 hectares</li> <li>Possibility of market growth: 700 farmers</li> <li>Type of corn: Yellow corn</li> <li>Type of buyers: oil producers, food producers, livestock breeding companies, eggs producers, and milk companies</li> <li>Type of organizational structure: familial</li> <li>Farmers require farming services</li> </ul>	<ul> <li>25 farmers attended</li> <li>Average land owned: 15 to 20 hectares</li> <li>Possibility of market growth: 100 farmers</li> <li>Type of corn: White corn</li> <li>Type of buyer: Millers</li> <li>Type of organizational structure: semi- familial</li> <li>Farmers do not require farming services</li> </ul>		

**Conduct follow-up workshop with the research and AgroEstacion teams.** In the fall 2015, I conducted a follow-up workshop at GSU in Atlanta with the AgroEstacion team to validate the outcomes and review recent events. Three members of the management team traveled to Atlanta; the goal was to have this workshop in a relaxed atmosphere and to engage the project between the academic and practitioner worlds. The participants in this follow-up were AgroEstacion's general manager, AgroEstacion's accountant, and ANSA's manager in charge of project development. The objectives were to follow-up on the team's most recent outcomes, hear about challenges it had faced, design together the next steps, and attend a presentation by a doctoral student who had been doing a case study on a project in Bangladesh that was similar to AgroEstacion. The AgroEstacion team first gave a presentation on advances in the process of starting up the two franchisees stores. AgroEstacion team members reported that delivery of the two stores had to be delayed due to permits and other issues related to construction. The original target month to open both stores had been September 2015; at that follow-up workshop, the team announced that the opening date was now late October 2015. Then, AgroEstacion team discussed how the training plan was progressing and covered other details covered in the previous section of this dissertation.



Illustration 4 *e*-invitation to the Growth forum

AgroEstacion's team reported that telecommunications as an issue, particularly with the Ayotitlan store. The general manager summed up the problems: "We faced a problem regard to the telecommunications in this store. It is located in a village with limited Internet access, the speed is extremely slow—no more than 1.5 MB—and the store

is also located in an area that faces bad mobile phone reception, so that wasn't an option either. Finally, we decided to hire satellite Internet service. In Mexico, that is very expensive, but we are hoping that in the medium term, with the opening of another store, we will dilute this cost.

As the presentation continued, our researchers learned that the AgroEstacion accountant was already taking control of the operative accounting and fiscal matters of both franchisees, exploiting the knowledge resource of the firm. What the accountant found was a mess in both businesses; order had to be implemented. At this point, the research team's advisor intervened: *"This is very important. Let's recall that BOP not only means the lack of money, but also the lack of many other assets—like, in this case, education, knowledge, and skills. This is an example of co-creation of value."* 

The workshop advanced and other topics were presented. The AgroEstacion team informed us that it had applied for three different sources of funding, both private and public, but so far, ANSA was the only financial supplier for the project. Also, the team said that the initial investment for the overall project was projected as \$500,000.00 USD for seven stores (including the two already chosen). This initial investment included:

- Total transformation of the stores (aesthetics)
- IT equipment and installation
- Furniture
- Initial inventory
- One truck
- Training

### • Opening event

AgroEstacion team members then talked about a small firm in Mexico City, owned by a Mexican-German woman who had heard about AgroEstacion through the Indaparapeo franchisee, who had bought fertilizer and seeds from her for many years. Her small company had 17 years' experience in the industry and owned important resources in its network, including organizational and knowledge resources about the process of buying fertilizers from big companies and selling them to the BOP farmer network. It also owned knowledge about collecting white corn and selling it first to big and small millers for flour production, then to tortilla producers. This businesswoman was interest in the AgroEstacion strategy because it was aimed at the BOP corn farmer, a market she knew well. The AgroEstacion general manager had met with her three times in the previous month, and she had expressed interest in being a part of the project. We discussed with the AgroEstacion and came up with three possible actionable options:

- ANSA could hire her as a consultant for AgroEstacion and absorb her operation
- She could become an AgroEstacion franchisee
- The AgroEstacion general manager could get closer to her company and learn more details about the operation to have more data for making a decision; however, because it was a one-person operation, we concluded that the most important resource in her network was experience and knowledge.

We all agreed that, before taking any steps, a better understanding of her business was needed. Once the AgroEstacion team finished its presentation, a former research team member who had participated in the first action research stage presented the case study on which his own dissertation was grounded: a company similar to AgroEstacion, based in Bangladesh and developed by CARE. The AgroEstacion team listened with enthusiasm, as it presented an actual case that was already in motion with 70 stores. It also offered useful information; based on this case study, the AgroEstacion team decided to change its budget for the stores and aim for a less expensive look.

**Summary.** Phase six represented the implementation of the project—that is, the *action* in our action research. In this phase, two local distributors were formally selected based on their BOP networks and their physical, knowledge, and organizational resources, as well as because their market and context differences will enrich the project. A date was set to start the cross-learning forum to co-create value. By this time, the project was moving forward. AgroEstacion teams took over accounting responsibility from the franchisees and a "cleaning" process began to put the fiscal issues in order. Table 22 summarizes these results.

Firm network	BOP network	Options	Value co-creation
<ul> <li>Convening power (organizational)</li> <li>Training capability (organizational and knowledge)</li> <li>Accounting administration (organizational and knowledge)</li> </ul>	<ul> <li>Network of farmers (organizational)</li> <li>Brokerage experience (knowledge)</li> </ul>	<ul> <li>Selection of two franchisees</li> <li>Growth forum</li> <li>Training process</li> <li>Accounting control implemented</li> <li>Third franchisee candidate</li> </ul>	<ul> <li>Cross-knowledge process</li> <li>Knowledge sharing across a wide spectrum</li> <li>Smaller learning curve</li> <li>Controlled and organized growth</li> </ul>

**Table 22 Summary of Strategizing Process Options** 

### **VII.7 Engaging Franchisees**

Between October and December 2015, the AgroEstacion project became a reality. The corn harvest was near and a good rainy season forecasted a good year for farmers in the states of Jalisco and Michoacan in 2015. The new franchisees were excited; despite much work to be done in the stores, everybody was confident that 2015 would be a good year.

Then, on October 23, Hurricane Patricia struck Mexico. Patricia was considered one of the biggest and more devastating hurricanes in the country's history; Illustrations 5 and 6 show the size of this meteor.

Patricia struck the coast at 17:40 Pacific Time and moved through the center of Jalisco state. Fortunately, the phenomenon hit the "Sierra Madre oriental"—that is, the West Mountains—and lost strength there. But winds and rain did their part in devastating the crop fields. One of the areas affected by Patricia was where the first AgroEstacion store was almost ready to open: the village of Ayotitlan. Winds overthrew cornfields that were almost ready for harvest. Illustrations 7 and 8 show images from cornfields from farmers in the area's AgroEstacion network.



Illustration 5 Hurricane Patricia hitting the Mexican coast



Illustration 6 Hurricane Patricia (left) compared to Hurricane Katrina (right)

One of AgroEstacion's first acts was to implement a plan to help the franchisee in the affected area. This franchisee and her BOP network of farmers had signed the CFA, and they were obligated to deliver a contracted amount of corn grain to a specific buyer—otherwise, they could be fined and face problems when it came time to sign a contract the following year. Using ANSA's organizational network, AgroEstacion contacted farmers in regions not affected by the hurricane who did not have a buyer for their corn. It then made agreements with these farmers to supply their corn to the franchisee, and thereby let it fulfill the contracted commitment.



Illustration 7 Cornfields affected by Patricia 2015



**Illustration 8 Cornfields affected by Patricia 2015** 

Launch first two franchises stores. On November 12, 2105, the first AgroEstacion store opened in a ceremony to which farmers, suppliers, and ANSA personnel were invited. Illustration 9 shows the *e*-invitation for that particular day. AgroEstacion invited 120 farmers to the event; it also invited the Michoacan franchisee to initiate contact between the two franchisees prior to the first Growth Forum. The event started at noon and almost all the invited farmers were in attendance. Most were senior

farmers and their average age was around 50. They arrived with their wives, and some brought their whole family. During the event, the franchisee of the store gave a presentation, then gave the microphone to the ANSA CBO, who spoke briefly before introducing ANSA's CEO, who explained the new company's objective.



**Illustration 9 AgroEstacion opening day invitation** 

In her opening speech to the farmers, the franchisee said: "*I'm grateful to have* you all at this event now that we are an AgroEstacion store, in partnership with ANSA—a new adventure that will help us to provide you with better products and services." In the follow-up interview, she added: "*I wasn't nervous about the development of the whole* project because ANSA was in charge of it all—*I just agreed with what ANSA asked me.*" The second franchisee from Michoacan also participated in a follow-up interview. "*I* think this is a dream come true, the store, the warehouse—this is a dream for the owner and also for me. When the ANSA's regional manager told me about this, I saw this far away from our time—and at a certain time, I thought that the project would probably be forgotten." Illustrations 10, 11, and 12, show the inauguration day event.



Illustration 10 Inauguration day of the first AgroEstacion photo 1



Illustration 11 Inauguration day of the first AgroEstacion photo 2

By the end of November, the second franchise in Indaparapeo, Michoacan, was in operation, with all the store details and IT equipment delivered and installed. Due to the holidays and the proximity to the Growth Forum event in the second week of December, the AgroEstacion team and the franchisee decided to have the opening day event in January 2016. Illustrations 13 and 14 show the second store in operation.



Illustration 12 Inauguration day of the first AgroEstacion photo 3

**Initiate the second training process for franchisees.** The AgroEstacion team, in collaboration with ANSA's administrative managers, designed the second training program for the AgroEstacion franchisees. The goal was to develop a managerial program to train the franchisees as managers, taking into consideration their lack of formal training.



Illustration 13 Indaparapeo village's AgroEstacion exterior view

The program was designed in collaboration with the follow managers:

- ANSA's CBO
- AgroEstacion's General Manager
- ANSA's human resources team
- ANSA's IT manager
- ANSA's internal auditor



Illustration 14 Indaparapeo village's AgroEstacion interior view

In a meeting of the AgroEstacion and the TMT teams that took place during the second week of December 2015, AgroEstacion's general manager presented the training process plan to the TMT, represented by the CBO. The training program was designed to cover the franchisees lack of managerial training, aiming to develop them into leaders—not only in the market with their farmers, but also with their families and employees. The program was divided into three modules:

- Business administration
- Human resources management

• Agribusiness

For this training program, AgroEstacion and ANSA exploited the resources in their own firm network, helping to develop the strategy and, through it, to inform the BOP network. The CCO and the President of ANSA were concern that improving these small businesses might be a double-edged sword: if the franchisees improved themselves sufficiently, they might at one point decide to leave and be, through this training process, well-prepared competitors. However, AgroEstacion and ANSA managers believed that this was a risk both firms should take. Table 23 shows the training program and time required.

Ι.	Business Administration	Duration (hours)
• • •	Introduction to Microsoft Excel Finances for non-financials Operational accounting Management of credit Effective bill collection	8 8 8 4 8
II.	Human resources management	Duration (hours)
	Basic management of human resources Teamwork Assertive communication Emotional intelligence Coaching Leadership	8 8 6 6 4 4
III.	Agribusiness	Duration (hours)
• • • •	BUMA (agrichemical container harvest) Customer service Production chains Agrimarketing Agribusiness	4 6 5 4 5

 Table 23 Training process program for franchisees, 2016
**Design the Growth Forum.** One of the co-creating value activities that powered AgroEstacion strategy is the cross-knowledge process expected between the franchisees and the firm (which enables and triggers the process) and between the franchisees. The Growth Forum was conceived during a research team workshop in the summer of 2015. On the blackboard, my advisor sketched a list of activities that the firm could organize and strategize around to take advantage of the BOP network's existing knowledge resources as well as those that will be created every crop season. As he noted: "*This is valuable data, and we need to think how are we going to collect it as much as possible.*"

This process triggered a process called the *Growth Forum*. "Growth" is a word with powerful meaning in the farming context, given that crops, cattle, and poultry all must grow to bring success to the farmer. That name was also selected because it implies the growth of the franchisees as professionals—businessmen and businesswomen—and also as human beings. The first Growth Forum took place December 10–11, 2015, at ANSA headquarters, beginning with a day-long training by an external consultant in the contract farming process, and followed the next day by the Growth Forum itself. The event's agenda included:

- AgroEstacion presentation
- Business Partnership Agreement signing
- 2016 training plan presentation
- Season 2015: Spring-summer experiences (cross-knowledge)

On the first day, a government official from the Agriculture Department gave a lecture about contract farming and the CFA, and the benefits for farmers and franchisees.

Because franchisees, AgroEstacion, and ANSA personnel already knew about the subject, the department official was able to provide valuable pointers for enriching their existing knowledge. Illustrations 15 and 16 show the first day of the Growth Forum.



Illustration 15 Growth Forum day 1 photo 1

The attendees were:

- Franchisee #1 from Ayotitlan, with her daughter
- Franchisee # 2 from Indaparapeo, with her husband and two employees
- From AgroEstacion, the general manager, the accountant, and administrative support
- From ANSA, the CEO, CBO, the regional manager and a sales rep from Michoacan state, the seed department manager, two seed sale reps, and the purchase manager



Illustration 16 Growth Forum day 1 photo2

On the Growth Forum's second day, ANSA's CBO began by presenting AgroEstacion's background, the crafting process, and the plans for 2016. Then, the general manager for AgroEstacion presented the social impact that AgroEstacion will create for BOP farmers through the CFA process. Tables 24 and 25 present the difference in financial productivity for farmers with and without AgroEstacion (the dollar rate at the time this table was created was 17.50 Mexican pesos per dollar). As the tables show, AgroEstacion's multiply effect creates benefit for the BOP farmer and thus has social impact. This direct impact on farmer finances positively affects their context and improves their quality of life.

During a break, I took the time to conduct a follow-up interview with both franchisees individually. The franchisee from Indaparapeo had positive remarks, as well as points about areas she thought needed improvement. She said that AgroEstacion should focus on improving the speed with which it answers the needs of franchisees: *"The requirements from the farmers have a little space of time, and sometimes ANSA's Business Unit in my area takes too much time to answer my requirements—sometimes* 

even more than two days." Also, she said the subject of fertilizer needed more brainwork regarding how AgroEstacion manages the purchasing process and logistics for this essential product. "Fertilizer and seed are essential, no matter if you have the best agrichemicals, or the best technical advisors, if we don't have these two products, we'll lose our farmers."

Income and expenses	Without AE	With AE	Difference			
Revenues from sales	\$160	\$173.06				
Income for compensations	\$0	\$23.30				
Income for productive induction	\$0	\$20.00				
Total income per ton	\$160.00	\$216.36	\$56.36			
Average productivity per hectare	7 tons/ha	7 tons/ha				
Total income per hectare	\$1,120.00	\$1,514,52	\$394.52			
Technological package cost	\$1,097.08	\$1,056.17				
Insurance	\$0	\$38.34				
15% of coverage paid by the farmer	\$0	\$12.19				
Brokerage cost	\$0	\$20.00				
Total cost for farmer	\$1,097.08	\$1,126.70	\$29.62			
Profit per ton	\$22.91	\$387.83	\$364.92			
Note: We considered a productivity of 7 tons per hectare in raining season, a cost per hectare of USD \$2.20 per coverage for the farming agreement, and a brokerage cost of USD						

Table 24 Financial benefit for the BOP yellow corn farmer

*\$2.85 per ton* 

As for her positive comments, she said that being an AgroEstacion franchisee versus an ANSA distributor has made a great difference: "Now I have someone that listens to my demands, questions, or requirements, and give me a fast solution. It is like

*having your own account executive, and that you are his only account.*" She also had positive comments about the experience of having all the administrative processes working at her store. Now, she said, all the information is in order and easy to access.

The forum continued, and at one point, the franchisee's daughter from Ayotitlan asked a question that showed that extra effort was needed to make AgroEstacion's full benefits understandable: "What do we win, as a family, for being in AgroEstacion?" The franchisee from Indaparapeo Michoacan intervened and answer this question: "In my previous work, before I became independent, the group of farmers with whom I worked were very messy with their accounting matters, so I leave this small firm and then they got audited by the government and they got fined by almost USD \$571,000.00 for all the mess they had in their account information. So, AgroEstacion will help us to avoid this kind of problems and also there are other activities that AgroEstacion will do for us, like helping us to get better rates in our credits, etc."

Finally, the CBO presented the management training program presented in Table 23 and explained the objective of the program's structure. The franchisees expressed excitement about the program and thanked the team. At 14:00 Pacific Time, the Business Partnership Agreement was signed (see Illustrations 17 and 18).

Income and expenses	Without AE	With AE	Difference
Revenues from sales	\$160	\$215.77	
Income for compensations	\$0.00	\$23.30	
Income for productive induction	\$0.00	\$0.00	
Total income per ton	\$160.00	\$239.07	\$79.07
Average productivity per hectare	7 tons/ha	7 tons/ha	
Total income per hectare	\$1,120.00	\$1,673,54	\$553.54
Technological package cost	\$1,196.85	\$1,206.11	
Insurance	\$0.00	\$38.34.00	
15% of coverage paid by the farmer	\$0.00	\$12.19	
Brokerage cost	\$0.00	\$20.00	
Total cost for farmer	\$1,196.85	\$1,276.65	\$79.79
Profit or loss per ton	-\$76.85	\$396.89	\$473.75

## Table 25 Financial benefit for the BOP white corn farmer

Note: We considered a productivity of 7 tons per hectare in raining season, a cost per hectare of USD \$2.20 per coverage for the farming agreement, and a brokerage cost of USD \$2.85 per ton



Illustration 17 Signing of business partnership agreement 1



Illustration 18 Signing of business partership agreement 2

**Summary.** At the highest level, this phase was all about bringing people together to share knowledge and experiences. The franchisees' stores were already up and running before the PBA signing. The opening day of the first AgroEstacion store was a happy event, despite the damage done by Hurricane Patricia. The management training program for 2016 was designed in collaboration with ANSA's personnel. The knowledge sharing continued in the Growth Forum, which took place at ANSA's headquarters; there, knowledge was exchanged between the firm and its two franchisees, and practical problems the franchisees were facing were resolved as a team.

Table 26	<b>Summary</b>	of Eng	aging	Franchisees
	•/			

Firm network	BOP network	Options	Value co-creation
<ul> <li>Emergency process to help franchisees fulfill grain delivery commitments (organizational)</li> <li>Experience in training design (knowledge)</li> <li>Planning experience (knowledge)</li> <li>Contingency plan (knowledge)</li> </ul>	<ul> <li>Farmers' network</li> <li>Convening power of farmers' network</li> <li>Reaffirm initial knowledge about BOP network from the first four phases</li> </ul>	<ul> <li>Share supply capabilities</li> <li>Compare results for farmers with an agreement and those without an agreement</li> <li>Develop a management training program</li> </ul>	• Overstock of grain for one franchisee helps cover the lack of grain for the other

#### VII.8 Networking for Expansion

To be financially successful, AgroEstacion needed to expand its operation and enlarge its network. The TMT and the managers from both ANSA and AgroEstacion knew that. To be profitable, the project needed at least seven franchisees operating. This fact triggered the Networking for Expansion phase.

**Develop the Executive Advisory Board.** In the same researcher workshop in which the Growth Forum was conceived, we also came up with the idea of creating an executive advisory board. The main objective was to invite influential people from diverse fields—business, academia, and government—to join the board and contribute new ideas and viewpoints, but more important, to contribute through their networks. The

members of this board will be selected based on their reputation, experience, and networking capability. Given AgroEstacion's BOP orientation, the possibility of exploiting the networks of board members was extensive. The board would be presided over by the President of ANSA. Figure 12 shows the board's planned structure as of fall 2016. The TMT and AgroEstacion decided that the board's creation should occur after the opening of at least five to seven AgroEstacion franchisees.

Introduce the AgroEstacion business model to suppliers and governmental officials. Among the plans for 2016, AgroEstacion's team and ANSA's TMT intend to present the firm first to suppliers and then to governmental officials. Both teams agreed that AgroEstacion needed to be presented as a functioning entity, and no longer as a project.

To accomplish this required at least six months in operation to present a tangible network on both sides of the model, along with some experiences to talk about. The TMT believed that some of the MNC suppliers might be interested in AgroEstacion's development. In the follow-up with the TMT on September 28, 2015, the CCO shared exiting news: one of the MNC suppliers' top managers called him to express his company's interest in forming a partnership with ANSA to open 17 direct sales stores in different parts of Mexico; the purpose would be to shorten the commercial chain in specific crops, such as berries, vegetables, and sugar cane. The proposed partnership would be exclusively an investment through merchandise and capital with ANSA, and the MNC would have no legal ownership of the stores or interest in buying ANSA's stocks. *"They just want to push us to open these stores, giving \$25,000.00 USD per store in cash and \$25,000.00 USD in merchandises, with the unique condition that the stores* 

must be strongly oriented toward their brand and present publicity related to their company."

This kind of deal had no precedent in the history of ANSA and came to be seen as a risk due to the level of attention the TMT might focus on this distracting new project and away from AgroEstacion. Finally, however, the AgroEstacion team convinced the TMT members that both projects were different and complementary: the stores in partnership with the MNC supplier focus on crops other than the corn market and did not emphasize the BOP farmer market. This MNC will be one of the first to which the AgroEstacion team and ANSA's TMT will present the new firm and the project for the next five years. ANSA's TMT concurred that, to present this project to a supplier, it must be justified by the accessibility of the supplier's product line, as well as its ability to be adapted to the BOP corn farmers market.

During the firm's Christmas party, the CCO from this MNC told ANSA's CBO and CCO that his company wanted them to travel to Brazil, to their regional office, to meet with their Brazilian counterparts who are reaching the BOP market in a project that also does brokerage of crops.

AgroEstacion managers and ANSA's TMT agreed that March 2016 would be the right time to present the AgroEstacion project to at least three MNCs suppliers. This revived the preliminary option of a possible JV with an MNC, tailoring the JV to follow the Integrated Model of BOP Strategizing. Although we discarded this JV option in the first stage of the research, we realized it could be attractive to an MNC if the project were appropriately presented. One way to engage an MNC in the strategy might be to develop

the strategy in collaboration with an NGO such as CARE to mediate the operations, thus giving the MNC certainty as to the strategy's social meaning.

Scout candidates for the next two franchisees. In November 2015, AgroEstacion's general manager began the process to choose, through ANSA's distributors network, the next potentials franchisees to approach in 2016. In addition, in a follow-up interview in early December 2015, he expressed new ideas that emerged during his conversations with other ANSA distributors, one of which was strongly related to a preliminary option in Phase 2 of this project: "There are some distributors that heard about AgroEstacion, and they are interested in get in a partnership with us, but... I think that many of them do not qualify to be an AgroEstacion franchise." Some of these distributors owned resources in their network, but they also had additional characteristics that disqualified them to be in a PBA with ANSA. One of the local distributors, for example, owned an important network of farmers (knowledge and organizational) and had many years of experience in the corn farming industry. However, the distributor was a partnership between three brothers who were having problems between them related to succession plans. In addition, they could not be considered as BOP because they owned large extensions of land and a big ranch (physical resources). Another local distributor who approached AgroEstacion's general manager did not own a network of farmers and did not have experience in corn brokerage. However, this gave the general manager an idea: "AgroEstacion could have another service in its business model: we could offer to him (the local distributor) an outsourcing of managerial services, as if he were a franchisee. He had a lot of administrative and fiscal problems, he does not know how to manage his business, so I thought: Why can't we offer him the management of his store,

and we can put a small sign that say: managed by AgroEstacion. We'll provide the software and the training, but he will pay a monthly fee and, of course, he will do the investment in equipment and renovations."



President of ANSA

ANSA's CBO

Figure 12 Executive Advisory Board

This idea, which was similar to one of the preliminary seized actionable options in Phase 2, was well perceived by the TMT, and they encouraged the general manager to explore it further. In the last follow-up interview in mid December, the general manager expressed concerns about beginning the scouting process for new franchisees too soon. He expressed to me that, at this point, he saw great potential in the new firm, but the lack of financial resources available for fast use could compromise AgroEstacion's strength: "*I would like to have the certainty of the cash to buy the fertilizer and seeds for these two [existing] franchisees before thinking of recruiting new ones*." Supplying agrichemical and training had been a smooth process so far because ANSA owned these resources. However, in the case of fertilizer and seeds—specifically, the brand required by the farmer—cash was needed. "*I prefer to be sure that I'll be able to give all that we promise to the franchisees before opening new ones that will tighten our cash availability*."

The outsourcing of managerial service seems to him to be the best next step for AgroEstacion; to achieve it, the firm would need to add an additional person at the end of March 2016. This person's position would be for "implementation and operational tracing." The AgroEstacion team discussed the option of offering this position to the woman who led the small Mexico City firm (described in Phase 7.6). Offering the outsourcing service to her small firm would be a first step in transforming her organization into a future franchisee; it would also let the team collect the needed data.

**Summary.** During the development of this phase, changes began to occur. The development of the Executive Advisory Board was decided upon, and AgroEstacion and ANSA's team decided that 2016 would be the year to build this board after achieving concrete results with the first two franchisees. Scouting and selecting new franchisees were put on hold until enough capital could be accumulated to fulfill the needs of existing franchisees. Instead, a new service—outsourcing managerial processes—will be added to

AgroEstacion. In addition to creating value, this service might help AgroEstacion identify potential franchisee candidates. Some of ANSA's local distributors expressed interest in this service. A possible management-outsourcing client for AgroEstacion was also discussed: the small firm run by the woman in Mexico City, who is also a possible third franchisee. Table 27 summarizes the results in this phase.

Firm network	BOP network	Options	Value co-creation
<ul> <li>Convening power of relevant characters from diverse settings and backgrounds</li> <li>Possible exploitation and commercialization of management capability</li> </ul>	• Interested local distributors with potential to contract outsourcing service	<ul> <li>Design of the outsourcing managerial processes to offer as part of the business model</li> <li>Executive advisory board put on hold</li> <li>Possible outsourcing client found in third potential franchisee</li> </ul>	<ul> <li>Improve the performance of additional distributors</li> <li>Create value between ANSA and additional local distributors (microbusiness)</li> </ul>

Table	27	Summary	of Netv	working	for Ex	pansion
		•				

#### **VIII CHAPTER 8: DISCUSSION**

In this dissertation, I have presented my action research study with ANSA, a firm in which I am fully embedded, both professionally and personally. My objective was to help ANSA find a clear way to attack the challenges it currently faces—challenges that are creating problems in the industry, in the market, and within the organization itself, and that could, in the future, put ANSA's leadership position and possibly its very survival at risk.

This dissertation applied an Integrated Model for BOP Strategizing (Cazares et al., 2015) created during the first stage of the action research in collaboration with a team of researchers and my advisor. The model combines DCT and ODS to help firms strategize value co-creation with BOP farmers. During the action research, I applied the model to help ANSA develop and begin implementing AgroEstacion, a franchise-based new business targeting the BOP corn farmer segment in Mexico. Overall, I have presented a detailed account of how this new entity developed as an embedded answer to the research question: *How can an agribusiness company strategize and implement the co-creation of value with BOP corn farmers in Mexico?* In the following, I present my contributions to addressing ANSA's problematic situation, to the area of concern, to co-creating value with the BOP farmers, and to the theoretical framework itself (Table 1).

## **VIII.1 Contributions to Problem Setting**

In the context of an organization, diverse options arise from its dynamic capabilities. However, if the organization's management ignores those capabilities and lacks a clear understanding of its resources and how they are constituted, those options will go unnoticed.

ANSA had faced many challenges throughout its history. It had confronted and successfully overcome them by using its dynamic capabilities in a pragmatic way, by finding serendipitous outcomes that have improved the firm's position in both the market and the industry, and by selecting the actionable options almost by instinct. As a mature firm, ANSA must now change the way the executives envision the future and face its current challenges. Experience and knowledge are valuable resources that must be used in a formal way (David J. Teece et al., 1997). ANSA understood that its business model could be challenged in the near future as suggested by its distributors, industry experts, and suppliers. They also came to understand that the BOP strategic mindset offers great opportunities to help address this problematic situation.

By exploring and exploiting the dynamic capabilities of ANSA and its local distributors, this dissertation helped the firm design a new business model for penetrating additional markets in the BOP corn farmers' segment with the purpose of co-creating value with the distributors and the BOP farmers (Table 1). As a result, ANSA used the three elements of the Integrated Model for BOP Strategizing (Figure 7) to help address its problematic situation:

1. Designing and creating a franchise business platform. ANSA understood the need to develop a strategy downstream—that is, a strategy that would get the firm closer to the farmers. Also, ANSA knew the size and potential of the BOP corn farmer's market in Mexico, and the huge possibilities to co-create value in it. The Integrated Model for BOP Strategizing helped the managers identify the resources in the firm network and the BOP network (the local distributors) and subsequently sense the available options, seize the actionable options, and select a realizable

one that could help reconfigure resources to co-create value. This resulted in the new franchise-based firm AgroEstacion, which complements ANSA's existing business model. As such, it promises to penetrate additional markets with improved capabilities and without risking the firm's stability and control or limiting the freedom of its local distributors.

- 2. Exploring and exploiting the capabilities of the BOP local distributors. Observing that "both, exploration and exploitation are associated with learning and innovation, albeit of different types" (Gupta, Smith, & Shalley, 2006), ANSA learned to identify its own dynamic capabilities and use them to develop its firm network, as well as to explore the local distributors to better understand the BOP network and its resources. Creating the new business platform represents the innovation part, which promises to improve the performance of the BOP local distributors and thereby benefit both ANSA and BOP farmers. The new firm AgroEstacion will, in this way, exploit the capabilities and resources of both in the market.
- 3. *Metrics to judge the success of the strategy*. ANSA's TMT needs to measure the performance of AgroEstacion at two primarily points: the BOP corn farmers and the BOP local distributors. To measure the benefits created for the farmers, I presented Table 24 and 25 to help capture the financial benefit for BOP corn farmers of both types of corn: yellow and white. Further, as Table 28 shows, the franchisee, the technical advisor, and the marketing manager will record the main figures in the farmer cropping process—from the initial budget of raw materials

(seeds, fertilizers, agrichemicals, and mechanical works) to the price of the corn at the selling point to any additional costs—to calculate the profit earned by the farmer. To measure the benefit created for the BOP local distributors, AgroEstacion will supervise the accounting process of each franchisee, including sales, costs, and expenses, to establish the financial balance of each store. Finally, the management team of AgroEstacion developed a financial statement plan for the seven years (see Table 29).

4. Co-creating value. ANSA and the BOP local distributors will seek to improve their performance and strengthen their position in the market through continuous strategizing of AgroEstacion as a business platform. ANSA will seek to expand its participation directly with the BOP farmers. The goal is to increase its market penetration and influence by completing the commercial cycle as described in Figure 2 and by learning from the BOP local distributors how to execute and improve the brokerage process of corn. Once this process has been established, ANSA will continue to improve the products and services to the BOP farmers. Hence, the BOP local distributors will own a better, more organized, and more profitable store, and the farmers will improve their corn production, hopefully moving them out of the BOP segment through a process facilitated by AgroEstacion.

# Table 28 Farmers benefit metrics table

Farmers benefit metrics					
Farmer's name:	Type of corn:	Year 1	Year 2	Year t	
• Area planted (# Ha)					
• Farming agreement process (?	% * Ha)				
• Soil preparation (Fixed cost)					
• Soil analysis (Fixed cost)					
• Pre-seeding herbicide (Variab	le depending in weed presence)				
Seed cost (Price of 1.5 seed pot treatment	er bag) * (# Ha) 1 bag per Ha) + seed				
• Fertilizer cost 1 <sup>st</sup> & 2 <sup>nd</sup> applica	ations (Price of fertilizer mix)*(# Ha)				
• Seeding (Fixed cost)					
Agrichemicals regular application (Technological package)					
Agrichemical unforeseen problems (Variable cost, undetermined)					
• Cropping process (Fee * Ha)					
• Corn produced (Ton * Ha) "P	erformance per Ha"				
• Brokerage process (Fee * Ton					
• Total cost per hectare ( $\sum$ costs					
• Total income for the farmer (Price of ton $* \sum$ tons produced)					
Productivity (Sale – Costs)					
(1) Waste is considered broken grains and plants that got stuck in the cropper machine					

	Projected income statements for the franchisee's store USD						
	2015	2016	2017	2018	2019	2020	2021
Income	653,443	784,131	823,338	864,505	907,730	953,116	1,000,772
Cost	519,771	623,726	654,912	687,658	722,040	758,143	796,050
Gross profit	133,671	160,405	168,426	176,847	185,689	194,974	204,723
Operating costs	54,317	60,648	63,385	66,248	69,242	72,373	75,647
Finance costs	24,481	29,377	30,846	32,389	34,008	35,709	37,494
Operational profit	54,873	70,380	74,194	78,210	82,439	86,893	91,582
Net profit	38,411	49,266	51,936	54,747	57,707	60,825	64,107
IRS	16,462	21,114	22,258	23,463	24,732	26,068	27,475
Employee profit sharing	3,841	4,927	5,194	5,475	5,771	6,082	6,411
AgroEstacion fee	25,989	31,186	32,746	34,383	36,102	37,907	39,802
Franchisee's earnings	38,411	49,266	51,936	54,747	57,707	60,825	64,107

## Table 29 Farmers benefit metrics table

## VIII.2 Contribution to the Area of Concern

Current literature does not focus on how firms can strategize and implement options to target the BOP market. As Prahalad has suggested (Prahalad, 2010), considerable effort has been invested in targeting the BOP market as consumers, but few efforts discuss how, specifically, firms can partner with the BOP (Perez-Aleman & Sandilands, 2008). Some literature could be considered as offering an exposition of firm strategies for BOP engagement, such as the role played by NGOs and MNCs in emerging markets to create a network of suppliers of raw material, involving companies like CocaCola or Starbucks (Sheth, 2011). In contrast, this dissertation presents detailed empirical insights into the process through which a single firm strategized the BOP market and created alliances with its BOP local distributors, transforming them into partners, improving their organizations, and developing a distribution chain to bring resources to the BOP in a better and faster way, thereby improving their lives—and, as a result, co-creating value across all stakeholder groups. As described above, this strategy includes a firm network (ANSA) and a BOP network (the BOP local distributors) who also engage the BOP farmers.

ANSA took steps to improve the business and operative quality of its BOP local distributors; this involved the risk that those local distributors, once their operation improved, could detach from the firm to become competitors instead of an allies. Improving the BOP local distributors' operation and transforming them into franchisees of a brand promises to increase ANSA's commercial operation as BOP local distributors increase the amount of products and services delivered to the market. In this process, ANSA will develop a new network of farmers, formerly under the control of the BOP local distributor; it will thereby create knowledge and improve its organization by leveraging its resources. The BOP local distributors will strengthen their own organizations, developing a more solid company through a more professional business process. Observing that "business process management therefore requires information to be accessed and shared across organizational and geographical boundaries" (Davenport, 1993; Sandberg et al., 2014), the BOP local distributors will not only supply better products and services to the BOP farmers, but become the conveyor of knowledge and

technology that will improve the production of the BOP farmer and ensure appropriate commercialization of their crops.

As such, this dissertation has helped open the black box of how individual firms might embrace the emerging BOP market through systematic strategizing. The reported strategizing was supported by theoretical insights from DCT, ODS, and the growing BOP literature.

#### **VIII.3** Contributions to the Theoretical Framework

The Integrated Model for BOP Strategizing (Figure 7) provided a practical tool to help ANSA managers develop their strategies. Other managers can adapt the model for diverse contexts, in essence creating their own roadmap for entering BOP markets and environments. At its core, the Integrated Model for BOP Strategizing allows managers to use DCT to explore and exploit how specific resources of both its firm and BOP networks can be translated into a viable strategy by using ODS to sense available options and seize the actionable ones, and finally reconfiguring resources to realize select options. Hence, this dissertation contributes to BOP literature by combining two theories into an integrated model that firms can use to strategize BOP options; it also demonstrates the practical value of the model through a detailed real-world case. Drawing on the theoretical literature and the empirical findings from ANSA, I suggest a number of propositions related to the Integrated Model for BOP Strategizing.

Proposition 1: Our Integrated Model for BOP Strategizing has applicability and adaptability for other contexts and industries when the objective of a firm is to engage in

the BOP markets with little previous knowledge or experience and to draw on its existing downstream networks.

This proposition suggests that any type of business with no direct access to the BOP market can embrace, exploit, and develop its upstream and downstream networks to include the BOP segment successfully into its market (Tashman & Marano, 2009). Although the model was developed in an action research in the agribusiness context in the Mexican market, it has potential applicability in other situations. BOP markets are numerous and scattered, and their similarities in different economies are considerable. Still, commercial and geographical accessibility is challenging, even for MNCs entering into those markets, particularly if they have no previous experience. As such, the Integrated Model for BOP Strategizing will likely work best for medium-sized companies with limited financial resources and with some established BOP network activity that will give them a starting point to co-create value.

Proposition 2: The process of iteratively sensing, seizing, and reconfiguring options links DCT and ODS into a practical managerial approach that can help a firm develop a successful strategy to venture into the BOP market.

A long as a firm identifies its dynamic capabilities to recognize and classify its resources, this process offers a careful and detailed decision-making and strategizing tool. During this process, the sensing phase supplies a list of new opportunities that become available options (David J Teece, 2007), as in the action research's first stage in phase 2 of the problem-solving cycle, when multiple options emerged from the data collection process. However, these sensed available options needed to be improved and

systematically examined in terms of desirability and feasibility (Sandberg et al., 2014) in order to suit the firm's reality and capacity. Only then could they be transformed into actionable options. As an example, one of ANSA's initial available options sensed was the possibility of a JV with an MNC, with the objective of strengthening ANSA's market position and using the MNC's resources to access the BOP. It was an upstream option, and one that was not in the firm's control. Because of this, one side of the Integrated Model for BOP Strategizing was blurring and unclear, and the process of informing and developing was incomplete. Using ODS lets firms combine the seized actionable options and structure them into a realizable one through a process of analysis between researchers and practitioners. This was the case at ANSA, and it was through this triggered reconfiguration process that the new firm, AgroEstacion, was designed. As this case shows, both theories, DCT and ODS, shorten the space and time required to develop a strategy.

Proposition 3: The business model that results from applying the Integrated Model for BOP Strategizing can increase the likelihood of successful co-creation of value with the BOP market.

As explained by Prahalad, (Prahalad & Ramaswamy, 2004): "Co-creation is about joint creation of value by the company and the customer. It is not the firm trying to please the customer" (p. 8). The Integrated Model for BOP Strategizing is fundamentally a strategy created by the iterative combination of DCT and ODS and the unfolding of resources from two networks to realize an option. This option enables the creation of value for both networks and the stakeholders in a dynamic model of business-to-businessto-consumer (B2B2C). The strategy allows a series of benefits for the BOP market. In my

summaries at the end of each phase of the problem-solving cycle, column 4 in each table displays what I consider to be the value co-creation outcomes developed in each phase. BOP markets are sensitive and people in them tend to be loyal when firms treat them as producers rather than simply consumers (Karnani, 2007). The perception in the BOP market is that, when a firm engages with them, it means that the firm trusts them, so they trust the firm. In my research, the local BOP distributors had a positive perception of the business model. They felt a positive change in the way the firm viewed them. One of the female entrepreneurs interviewed after being selected as a franchisee said the following: "Everybody knows ANSA has not the cheaper price in the products, but the way it treats us, the clients, makes the difference." The business model that emerged from the Integrated Model for BOP Strategizing gives and receives, developing a process of mutual growth /or both the firm and the BOP. When other firms choose to follow the Integrated Model for BOP Strategizing, they must keep in mind that the base is *value cocreation*, which both enables and triggers the strategy. Value co-creation is also a perception sustained on evidence. Both networks perceive that they are creating value for themselves and for the other.

Proposition 4: Firms will more likely be successful in engaging with the BOP if they combine upstream and downstream resources into new value co-creation capabilities.

As Helen Keller famously noted: "Alone we can do so little; together we can do so much." BOP markets are scattered and numerous; the possibilities to succeed in them are higher when we join forces with additional stakeholders. Various barriers also exist: corruption, illiteracy, inadequate infrastructure, currency fluctuations, and bureaucratic red tape that make doing business profitably a challenge in this segment of the market (Prahalad & Hammond, 2002). No matter how unique a firm's dynamic capabilities are, combining the resources of different networks helps ensure a successful strategy. Using networks gives the strategy a solid structure, as long as the resources owned by these networks are identified and classified as useful to the development of options. During the development of my dissertation and the business model of AgroEstacion, an MNC approached ANSA with a concept similar to the Integrated Model of BOP Strategizing. Without knowing of the model's existence, they expressed to ANSA the desire to create a soft partnership with the firm, aimed at getting directly to the BOP market. When presented its proposal, the MNC's representative named both the MNC's resources and those owned by ANSA, suggesting that the alliance was a good way to get directly to the farmer of specific crops. The MNC was looking to co-create value with ANSA. The Integrate Model of BOP Strategizing and the crafting of AgroEstacion were applicable in this particular case, to solve this particular problem. However, they almost certainly can be reconfigured, improved, and adapted to other situations. Further research should be done to perfect the model and the strategy for wider applications.

Proposition 5: A firm can accelerate its engagement with the BOP market by leveraging NGOs as mediators to establish joint ventures upstream with major suppliers and other investors.

The presence of a well-known NGO gives any social project developed by a private firm the social strength needed to be recognizable. An NGO should be an active consideration in the strategy; the operational enrollment of a NGO is an important element that could give muscle to the strategy in the eyes of the stakeholders and the

public. In his 2007 article, "The Miracle of Marketing to the Base of the Pyramid: How the Private Sector Can Help Alleviate Poverty," Aneel Karnani wrote the following: "An important element of the BOP proposition is that the MNCs should take the lead role in the BOP initiative to sell to the poor. In fact, to the extent that there are opportunities to sell to the poor it is usually small to medium-size local enterprises that are best suited to exploiting these opportunities." (p. 96) ANSA's TMT, the AgroEstacion managers, and I consider AgroEstacion a co-creating value strategy that could maximize its performance by enrolling an MNC in the strategy. The presence of an NGO such as CARE could provide a needed social profile to make the strategy more attractive to an MNC This type of relationship between NGOs and MNCs is not new; as Paola Perez-Aleman and Marion Sandilands noted in 2008, the relation between NGOs and MNCs can mitigate the barriers of entry for small or BOP farmers or businesses in the global market (Perez-Aleman & Sandilands, 2008). Having an NGO such as CARE involved in an intermediary role in the AgroEstacion strategy could create higher interest among MNCs, including ANSA's existing suppliers.

#### VIII.4 Concluding remarks

In this action research, I was a member of the TMT of the organization where the research was conducted, and I was the principal responsible for the design and development of AgroEstacion, the new business entity. This position was useful for data collection and gave me access to secondary data useful for developing a mental map of the project. However, as an insider researcher (Coghlan & Brannick, 2005), one faces risky moments of influence and biases throughout the entire process. My position as not only the CBO, but also the firstborn of ANSA's founder put pressure on the development

and timing of the research and the construction of the strategy. I was literally running two marathons, advancing and following the structure of the research process while fulfilling the dates to deliver on practical problem solving. I took great care to follow principles for rigorous and ethical research, keeping in mind my position in the firm and leveraging the collaboration with my advisor and co-researchers. Also, I limited the number of biases by carefully triangulating between multiple data sources and by continuously managing my commitment to both the firm and the doctoral program.

Overall, it is important to emphasize the limitations that result from this being a single case study and from adopting DCT and ODS as the key theoretical inspirations. In addition, I will mention the following research conditions that have practical implications for how the results might be leveraged in other contexts:

- 1. *Ensuring management support.* The project to strategize BOP options at ANSA had strong management support and ownership. Complex organizations with strong internal barriers can slow the strategizing process in multiple ways. Also, if the project does not have freedom to experiment and the authority to make changes, the strategy can easily get stuck.
- 2. Focusing the business. Initially, AgroEstacion is focusing on the market of grains, specifically corn. Corn can, with the right precautions, be stored and kept for long periods of time and sold on different markets in Mexico. However, we also interviewed farmers from the Pacific coast that cultivated fruits and vegetables— crops that need special types of storage, have short shelf lives, and typically target US markets. In addition, we interviewed local distributors serving BOP farmers who cultivate corn for self-consumption by their cattle. These farmers were dairy

producers, and their problem was to produce and sell milk. It is probable that after perfecting the business model of AgroEstacion, the firm can start to venture into those types of markets. For each particular firm, multiple options will exist for engaging in BOP markets. An important decision is how best to prioritize and sequence these options.

- 3. *Leveraging dynamic capabilities.* The Integrated Model for BOP Strategizing can be used in different firms as discussed above, but the strategizing depends strongly on the presence of requisite dynamic capabilities and resources (Constance E. Helfat & Margaret A. Peteraf, 2003). Without the presence of these dynamic capabilities and resources to create leadership in the industry and the market, the model is unlikely to lead to a successful strategy.
- 4. Appreciating the political context. Unlike the coffee growers in Mexico that have the support and supervision of an NGO in the agreement between them and the Starbucks company (Sheth, 2011), developing support for the BOP corn farmers requires considerable effort. Only Monsanto is actually doing some work with BOP orientation (Glover, 2007), but its efforts are frequently blocked by NGOs that are fighting against the use of genetically modified organisms (GMOs), specifically the use of improved corn seeds. Corn crops in Mexico have become a political bounty since the release of the GMO corn seed at the end of the 20th century. In addition, in the Mexican farming context, there are more foundations than NGOs. For example, the *Fundación Mexicana para el desarrollo rural* (Mexican Foundation for Rural Development) locates a farming community, organizes a group of farmers with the same profile, and trains these farmers based

on provision of a technological package. Obviously, it is important for any BOP strategy to consider such options for support and create the requisite alliances for realizing them.

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